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# Landscaping



For Modern  
Canadian Living  
In The Prairie  
Provinces

by

THEODORE ONUFRIJCHUK

LANDSCAPE  
ARCHITECT

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*"... It is an attractive little book and the  
homey philosophy regarding the importance of  
landscaping for the home owner makes it very  
interesting reading."*

L. H. SHEBESKI  
PROFESSOR AND HEAD  
DEPARTMENT OF PLANT SCIENCE  
THE UNIVERSITY OF MANITOBA







JANUARY 1920

THE UNIVERSITY OF CHICAGO



# LANDSCAPING

*For Canadian Modern Living in the Prairie Provinces*



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THEODORE ONUFRIJCHUK

*Landscape Architect*

# *Landscaping*

FOR CANADIAN MODERN LIVING IN THE  
PRAIRIE PROVINCES

*Preparation and Correction of Language*

ANASTASIA ZUCK, B.ED.  
YORKTON COLLEGIATE INSTITUTE

WITH ILLUSTRATIONS AND SKETCHES BY THE AUTHOR



REDEEMER'S VOICE PRESS, YORKTON, SASK.

*It seems to me that the greatest human ambition is to become a creator of something, even if it is just a garden beside the house. A garden that could bring peace and restfulness from this work-a-day world. A garden which will attract our native, Canadian bird — The Robin.*

AUTHOR



# Foreword

Presently we are witnessing a substantial growth of both large and small cities in Canada. In this development we see not only quantity, but also quality. The construction of homes is generally of a comfortable style, with large rooms, and windows that extend across a large portion of the walls.

For these large modern homes arises the necessity of good landscaping. Most of the owners of homes feel obligated and honoured to do the landscaping personally. This, however, requires knowledge and experience. Usually such owners avail themselves of the U.S. landscaping manuals, which, though usually well written, are not practical for Canada, and especially for the Prairies, in the choice of trees and shrubs, due to the difference in climate. For this reason the author felt the need to prepare this book, using the rich and beautiful choice of Canadian flora.

As a guide in the choice of shrubs and flowers the author used: "A List of Flowers, Shrubs, Vines and Trees Recommended for Saskatchewan Gardens" (University of Saskatchewan) and "Native Trees of Canada" (Department of Resources and Development, Forestry Branch), and the Botanical Garden, in the City of Yorkton.

The author wishes to express gratitude to his former professor, the President of the American Landscape School, Professor Yale C. Moeller, for the revision of the manuscript before printing.

It is hoped that this book will fill the gap in the Canadian landscaping literature, and that it will aid those wishing to landscape their property personally.

Sincere thanks are due to the following personnel who have so generously assisted financially with the publication of this booklet: His Worship, Mayor W. E. Fitchner and the City Council of Yorkton; Mrs. F. Tiller, City Administration Officer; Mr. I. B. Sveinbjorson, City Engineer; Horticultural Society of the City of Yorkton; Mr. & Mrs. B. Svenson; Mrs. A. Yaholnitsky; Mr. & Mrs. John Branisky; Miss Nellie Milner; Dr. & Mrs. Boris Tolchynski; Drs. P. & S. Potoski; Mr. & Mrs. A. Kindred; Mr. and Mrs. G. Patrician; Mr. and Mrs. M. Baker; Anastasia Zuck, B. Ed., and Mr. and Mrs. Wm. McMurtie.

THEODORE ONUFRIJCHUK



In this century we witness a tremendous growth and expansion of the cities in the world, especially in Canada. Whether it is in a huge metropolis, or a small town, the general expansion progresses of an accelerated speed. With the growth of cities, there is also an improvement in architecture. Most of the new buildings are built in a modern style with modern conveniences and facilities. They have the new look in comparison with the old style of buildings.

The reason for this growth and expansion of cities, in Canada, is the development of new industries, new factories and new business places. There is a demand for space, and that is why the building lots are more expensive. Locations have been allocated for new residential districts by city planners. Trees in wooded areas are being destroyed to make room for expansion. In their place we have houses, factories, business places and other tall buildings. The old residential districts were not logically planned in advance, and thus the narrow lots due to limited space. This resulted in long or endless streets with narrow alleys between them. These buildings blocked the direct rays of sunshine, and usually the curtains were drawn on these windows to keep the curious neighbors from peeping in.

Due to the unwise planning of the city streets and lack of space, the most important objective in man's life has been overlooked and neglected, and that is the concern for human health.



The lack of sunshine, fresh air, and greenness of vegetation as well as the turmoil and noise from street cars, buses and cars, and the poisonous gases from their exhausts, are all quite evident in the old residential districts. In the midst of all this, one may notice a sorrowful sight, a neglected tree with broken branches. Where we should have a variety of trees and plants, we have one or two uncared for trees which serve as the only refuge for birds.

We know that modern civilization surrounds us with all the conveniences and modern facilities, but other intolerable conditions only discourage and demoralize their surroundings. Such unfavorable circumstances have a direct effect on the health of its residents and thus shorten their lives.

This unwholesome environment leads to a nervous life or in other words a nervous tempo. The question arises — where did this nervous tempo originate? Our modern civilization was born at the time when these large cities started to grow up. About 150 years ago the great metropolises like London and Paris had only several thousand people. The expansion of cities came along with the advance of modern communication, giving the people a different outlook on life, but the new facilities and technical advances required more purchasing power or income. People worked harder and faster to better their income. This led to the fast life and the more accelerated tempo. The new inventions demanded that the people acquire a better education. This, too, added to the pressure with people always on the run.

No doubt, in many cities there are a few recreational parks, the city. The great and fantastic expansion in communication has increased this problem. The residential move or travel from place to place continued with a tremendous pace which never existed, even in the dreams of previous generations. All these

new conveniences or speed are not necessarily beneficial to the well being of this system of life. The modern way of living creates the nervous situation in our cities.

Another evident discomfort of civilization is the noise which is heard all over the city, especially in the residential districts. All this noise does not annoy the city's people in offices, houses and streets, but it does have an effect on the human nerves and thus helps to accentuate the nervous system of a being. The night life of the cities, too, has an effect on the nervous condition.

That is why the modern architects in urban areas work together with landscape architects to formulate the plans for new districts of the cities, where we can have more quiet by means of planned parks throughout the city. The streets must be planned in such a way that the sunshine can penetrate the lower stories of our buildings, even in winter. Therefore, the width of the street facing north and south should be at least two and one-half times wider than the height of buildings. The street, which faces east and west, should be at least four times as wide as the height of buildings. Homes should be constructed in such a manner that the rays of the sun can enter from all directions. The sun's radiance should brighten colours and make the people much happier.

The greenness of a city is the right road to good human health! The trees and plants beautify the cities in the same manner as beautiful clothes beautify people. Grey stone pavement and even small wooden houses which are surrounded by plants and flowers, always look more attractive and this green vegetation helps to pacify the nerves of the people. We realize what a great polluted cloud of poisonous gas hangs over the industrial cities. During the day this cloud rises to a height of five miles, but it falls to about forty-two yards at night. These

harmful gases are injurious to the respiratory tract of human beings. If the cities have many trees, these impurities settle on the leaves which have the power to purify the atmosphere. Therefore, we realize that trees are beneficial and necessary for the residents of the cities. Trees fulfill the work of a sanitary agency. The trees, in the process of growing, give off what is known as the phytoph combination, which has a fragrance. This fragrance also has the power to kill harmful bacteria. Trees noted for this ability are Mountain Ash, Birch and Pine. These trees create anti-bacterial surroundings.

Secondly, the trees provide shelter from the winds. The parks are guarded from fierce winds by these trees, although their tops may sway. Trees have a tendency to improve or stabilize the temperature of the cities. The concrete buildings, asphalt roads and streets absorb heat in summer and thus create a hot atmosphere. The trees on the other hand, by evaporating water through the leaves, manage to lower the temperature by  $10^{\circ}$  to  $15^{\circ}$  degrees during hot days. At night they retain the heat. The difference in temperature results in a movement of air, therefore we may say trees help to ventilate the city streets. It is important to have trees along the streets planted in such a manner that they will lead to city parks.

As was mentioned previously, city noise has an effect on the nervous system of human beings. The tree tops seem to absorb and deaden the noisy racket of a busy city. That is why one can hardly hear the noise of the city when he or she is in the park.

But, the greatest benefit we derive from the foilage of trees is that it is capable of utilizing carbon-dioxide and giving off oxygen, which is so vital to human beings.

Usually in cities the carbon-dioxide gas increases to .04% from its normal average of .03%. It is evident, that green vege-





tation absorbs 17 pounds of carbon-dioxide every hour over an area of one acre. The amount thus absorbed is equivalent to carbon-dioxide that is given off by 200 people in that time. That is why it is easier to breathe and relax in parks than it is in cities where there are no trees.

In cities having recreational parks, the children do not loiter in the business streets. They play in the parks, among the trees and flowers and this makes them happy and cheerful.

There is something unusual about trees and flowers. Not only is it easier for people to breathe the fresh air, but there is the opportunity to appreciate the beauty of trees and the blossoms of different flowers. Many people spend their time in parks so they can relax, refresh and recollect their thoughts, and regain strength and vigor for future work. The most educated people in the world uncovered certain truths in science and physics, while they relaxed and did their thinking in the quiet of parks. Newton discovered the force of gravity in an orchard. Currie also admits that he had spent many nights

walking in the parks till morning, concentrating on the radium cure for cancer. For the composer Chaikowsky, it was customary to walk in the parks while working on his compositions. The famous writer, Shakespeare, mentions in his writings the trees and plants of the world. The English people, to commemorate him, have established a great park in London.

We should remember, that parks have a direct influence on the cultural development of young people. They must be taught to love the trees and plants, and to make sure that every space of ground in cities is utilized to verdure and the beauty of flowers. We should educate and train our youth to care for them.

Not only should we be concerned with the greenness of the cities, but every resident should endeavour to have his lot planted to trees, plants and lawn. Through the co-operative effort of all the residents, the city could be made into a healthy and beautiful environment.



## Landscaping Classes

Landscaping may be broadly grouped in two classes:

1. Private — Landscaping individual home grounds.
2. Public — Landscaping of public parks, squares, streets, school yards, industrial buildings and cemeteries.

The profession of landscaping is known as landscape architecture and involves, in the case of private landscaping, the proper placing of homes on the site to take advantage of exposures and natural factors; the planning and construction of walks and driveways; planning, selection and planting of trees, shrubs, flowers and lawns. Landscape architecture is a profession practiced for the relaxation of man and to safeguard his physical and spiritual health. Landscape architecture is an art as much as music and song, painting and sculpture. A person who would enter this vocation must be a lover of nature and must study her secrets.

*Nature and revelation are like God's books, each may have mysteries, but in each, there are plain practical lessons for every day duty.*

TRYON EDWARDS

*"Nature is the glass reflecting God, as by the sea reflected is the sun, too glorious to be gazed on in his sphere."*

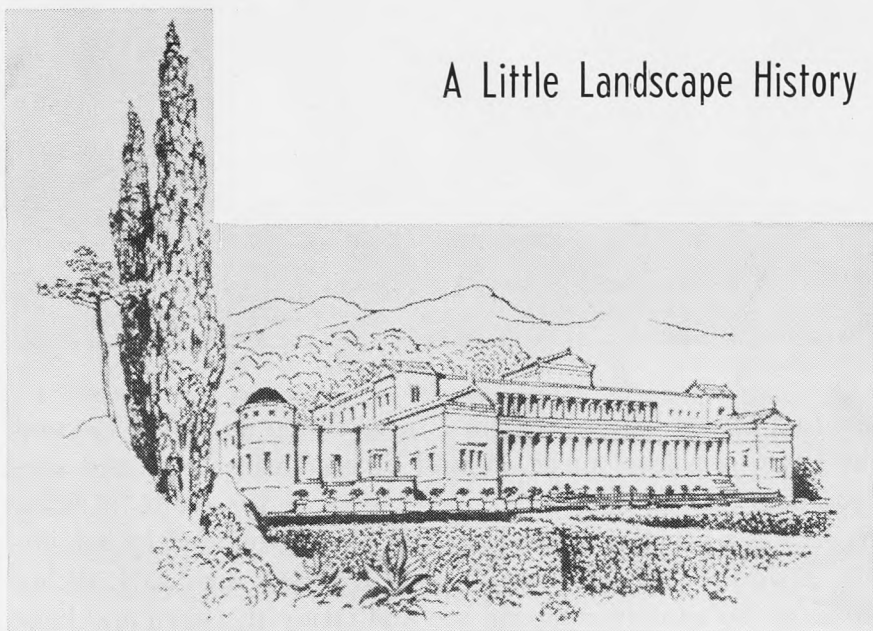
YOUNG

*“Nature has perfections, in order to show that she is the image of **G**od; and defects, to show that she is only **H**is image.”* PASCAL

*“Nature is a frugal mother and never gives without measure. When she has work to do, she qualifies men for that and sends them equipped.”* EMERSON

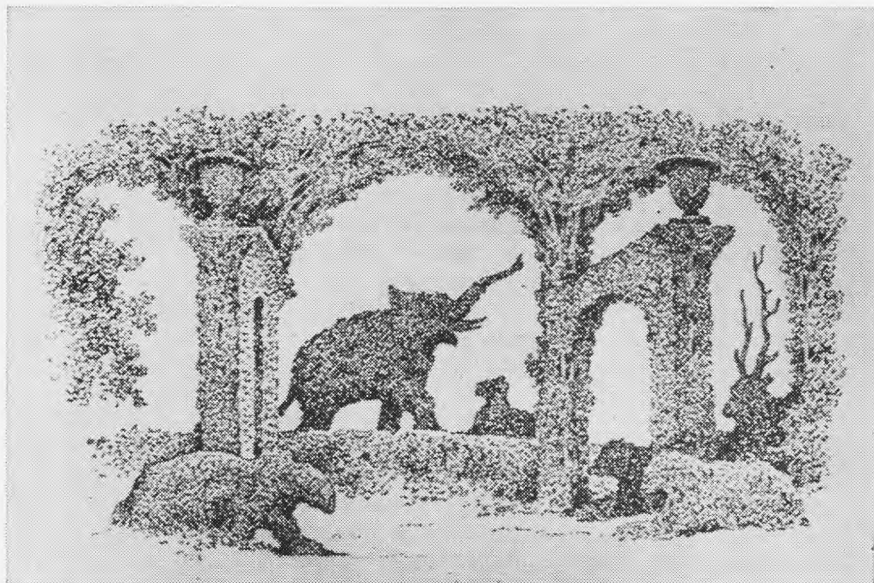


## A Little Landscape History



*The villa of Plinius*

In studying landscape architecture for individual house lots, one should review the history of improving the appearance of building sites in ancient times with planting of various plants and shrubs. Plinius, the Younger, (62-114 A.D.) in his works, described his own garden in the following manner: "Before the house, there is a garden terrace (zystus), divided in several sections by buxus. Beyond that is a small lawn, dotted with in-



*Trimmed to resemble animals*

dividual buxus plants, trimmed to resemble animals. Beyond the lawn, is a level piece of land covered with trees and surrounding this, is a lane bordered by a hedge on both sides. Nearby is a circular space for strolling, surrounded by a trimmed hedge of buxus and other small trimmed shrubs. Looking through the window, one can see and enjoy the lawn and hear the sound of a waterfall as it drops into the lake built of marble. In one place, one can see a small lawn, and in another, buxus plants, trimmed to resemble various figures, letters and designs spelling out the names of the owner and the designer of this plant architecture.”

From this you will see that even in ancient times, residential landscaping included lawns, trimmed hedges or shrubs and water.

In the Middle Ages, Albert Magnus (1193-1280 A.D.),



was considered by A. Humbolt to be a most learned man. In his treatise "Of Plants" he dedicated a special section to residential planting which he called "Viridantia, Viridaria" or green planting. Here he explains very thoroughly the esthetic and sanitary value of a green lawn to man and the need of this for recreation, rest, and pleasure which are so essential to mankind. He says: "Nothing pleases the vision of a human being more than the sight of fine, close-cropped grass." He points out that a beautiful lawn, with fine soft grass can be grown only on hard and not too fertile soil. Further, he suggests that more emphasis should be placed on lawns in residential lots and that they should not be cluttered with too many trees and shrubs. He goes on to say: "Do not plant a great many trees in your lawn. The smooth open space should have the advantages offered by the free fresh air." He suggested that it is desirable to plant trees to the south of a lawn to provide shade from the sun. He continues: "From these trees people desire shade rather than fruit." Consequently one does not cultivate at the base in order to preserve the grass. The area covered with grass he names "Cespes" in Latin.

From this we see that even 800 years ago, residential planting was carried on for esthetic and recreational needs, and that the principles of modern landscape architecture have changed little through the centuries.



## How to Plan and Plant Small Lots

In planning a lot layout for a new home, it is essential to establish the directions, and endeavour to locate the house in such a manner as to take full advantage of natural light and atmosphere.

The most lived-in rooms of a house should face south or west to promote health and happiness for the occupants. Sunlight promotes health and helps to create a cheerful atmosphere, therefore, it is most desirable to plan your dining area with an easterly exposure. The sun is a magic key to all nature and its morning rays, spreading radiance and cheer on the breakfast table, can give the family a wonderful send-off to work or study.

The kitchen is usually quite warm, due to the daily activities, and especially so in the summer. Hence it is quite satisfactory to have kitchen windows face the north or the east.

There are many ideas on the subject of bedrooms. As these are rarely used in the daytime, exposure to sunlight is not important. Where they are located on the second floor, they face in any direction.

Subdivision layouts are not always planned to provide for streets running due North and South. The most desirable layout provides for streets running at  $45^{\circ}$ , in which case the inside rooms of a house would receive the most light. During the summer the sun rises somewhat north of due east and in the winter, to the south, so that all windows will receive the rays of the sun throughout the year.



From the above, we conclude that a south-westerly exposure is the most desirable for a single family dwelling.

In general landscape planning of a parcel of land for a home, the lot may be divided into three main portions:

1. *Front* — That portion at the front of the house.
2. *Building Area* — The portion actually built on, including either attached or detached garage.
3. *Back* — A portion of this should be set aside for a vegetable garden, and provision should be made for clothes lines, storage, play area for children and a quiet arbor for family relaxation.

Assuming that a building lot is approximately 100 by 100 feet, the front of the house should be located approximately 30 feet from the lot line. The side yard should be wide enough so that the roof does not overhang the property line. Most urban centers have regulations setting out the minimum front and side yards, and one must be governed by these requirements in locating the house on the lot. Where there is a garage attached, the location of the house must be planned to provide a minimum of 9 feet in with the driveway.

A fence should be kept 2 inches from the property line but a hedge should be kept from 2 to 3 feet from the property line.

Quite often, a garage is built detached from the house, with a front driveway past the house. Plan to have the driveway two feet away from the wall of the house to avoid damaging the wall. This space should be utilized for flowers or lawn. It will require, therefore, anywhere from 11 to 14 feet on this side of the house — a two foot strip between the house and the driveway, nine feet for the driveway and two or three feet between the driveway and the boundary of the lot. The other side will depend on the width of the lot and the size of your

house. It is desirable to have a space from 10 to 15 feet or more. This width will be sufficient for a hedge or fence, lawn, and any necessary walk.



ill. 2 (A.L.S.)

The ideal location for a garage is largely a matter of preference. Some prefer the attached garage for convenience, particularly in the winter time. Others feel that an attached garage is an added fire hazard. A detached garage, particularly when it is located at the back lane, permits the use of a greater portion of the land for planting and saves on concrete work for the driveway.

The front entrance must have access by means of a sidewalk. Where there is an attached garage, a driveway must also be provided. These accesses should have the best possible approach and should utilize as little land as possible. (see ill. 2).

As previously mentioned, the back portion serves a variety of uses. These include a clothes line, a vegetable garden, a play area for children and where the family may enjoy quiet relaxation. This last should be designed as a secluded outdoor family room where the family could gather and enjoy the beauties of nature. This should be as near as possible to the house itself to be practical. In addition, the layout should include a terrace beside the house.

When the area has been planned to provide for the basic sections as previously outlined, the landscaper can plan the actual planting of trees, shrubs and other plants.

The planning selection, and planting is no less important than a solid foundation for a house. Before purchasing materials, it is necessary to plan the varieties and colors of plants to purchase and their approximate location on the lot. The plants should be selected and located as to color, size and shape, in order to form a living landscape throughout the year. Just as the painter blends his colors in painting a landscape, so must the gardener harmonize his plantings to create a scene of beauty.

To be able to create such a plantation properly, one must study the structure and size of the various plants. This is particularly important when trees or shrubs are planted near buildings or structures.

The shape of the crown of the tree selected is of prime importance. Classifications, according to natural shape, are as follows: round, oval, flat and pyramid, weeping, creeping and climbing. The shape of the crown is affected by the structure



of the trunk, the development of the branch structure, and exposure to sunlight.

From a decorative standpoint, tree trunks are classified according to shape, height from the ground to the crown, and the natural color of the bark. Trees with a straight trunk are most suitable for planting along pathways, squares or boulevards.

For planting in groups, low growing trees are more suitable. This includes trees which have the lower portion of the crown near or touching the ground and trees which naturally tend to have a crooked trunk.

There are trees with very attractive bark, like the Birch, the outside of which appears highly polished. The Linden has a very rough bark. Other trees have distinctive coloring in the bark. We find a dark grey bark on the Spruce, Maple, Little Leaf Linden, Black Poplar and Bird Cherry; a light grey bark on the Elm, Oak, Maple, Mountain Ash; yellow green on the Poplar and Plains Poplar; light brown on the Bird Cherry; white on the Birch and an orange shade on the Pine. Some species change the color of the bark at various stages of development. Shrubs also have varied colors in the branch structure:

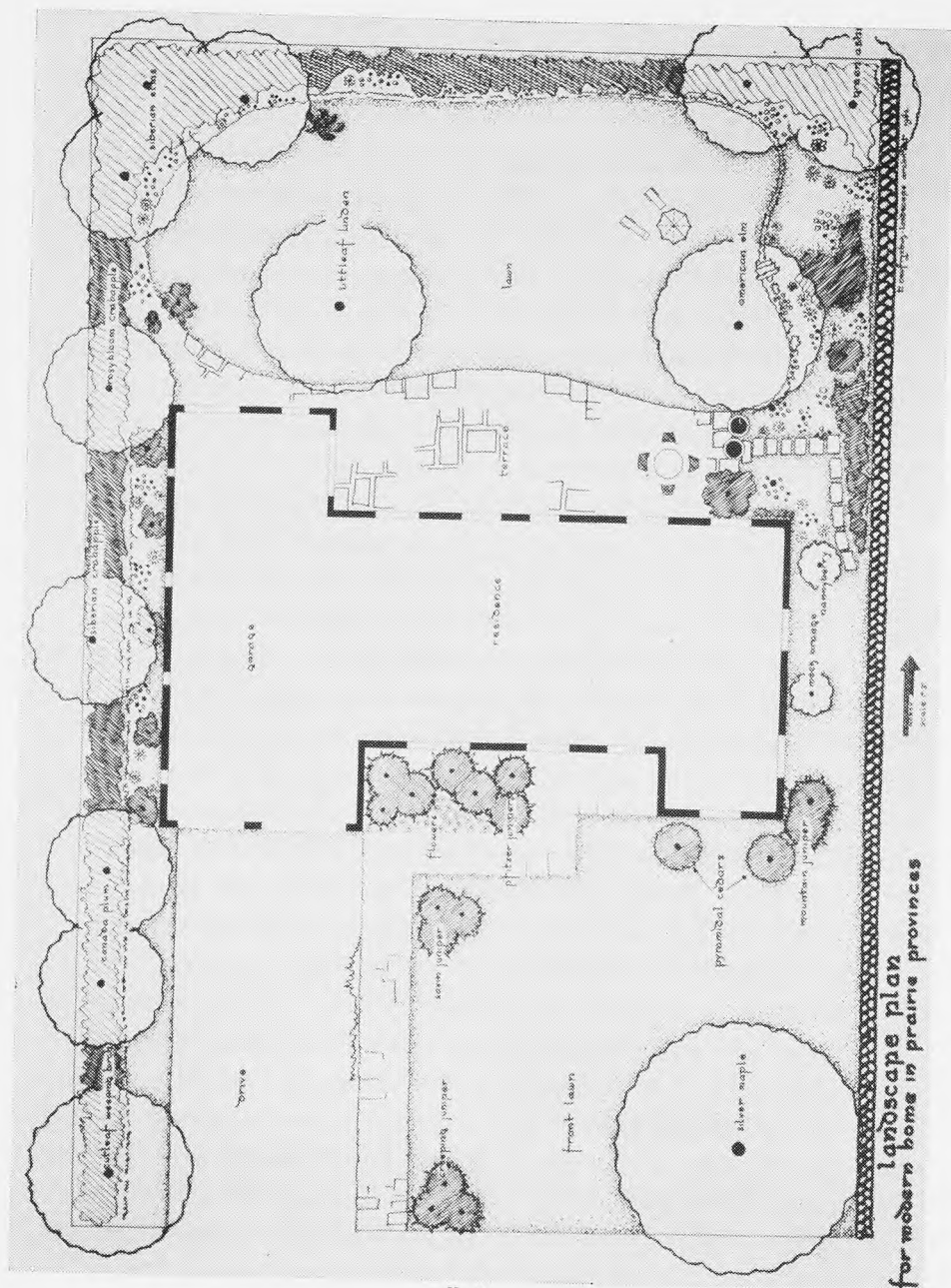
Black — Saskatoon, Black Cotoneaster and Rose.

Silver — Russian Olive.                      Red — Dogwood.

Grey-green — Peashrub.

Orange — Spirea, Honeysuckle.

The branch structure assumes different forms in different trees. In some, the branches grow vertically, while in others they grow horizontally. The vertical form is found in the branch structure of the Birch, Little Leaf Linden and Spruce. In normal development, the branches maintain their basic vertical position from which twigs grow sideways to create an oval crown of symmetrical beauty.



ill. 3

A horizontal-type branch structure is found in the Balsam trees — Poplar, Elm, Oak, and Maple. The trunks of these trees normally divide at 6 to 10 feet from the ground. As a result, the crown assumes a wide irregular shape, reflecting the wide rambling branch structure.

A branch structure with short, closely-spaced secondary branches and twigs creates a solid crown. A wider spacing creates a thinner crown.

Leaves are very important in landscaping. The human eye enjoys not only the shape of the crown, but appreciates, the shape and coloring of the leaves. Fine leaves, growing on fine and thickly set branches create the appearance of an impenetrable mass. Small leaves, on large, widely-set branches, result in a crown which appears to be dotted with hollows. Large leaves give a varied appearance depending on the type of branch structure.

Leaves can be classified as follows, with examples:

1. Very large — Walnut, Ohio Buckeye.
2. Large — Oak, Maple, Nannyberry.
3. Medium — Poplar, Little Leaf Linden.
4. Small — Birch, Willow, Cotoneaster, Honeysuckle.

Small-leaved trees, when viewed from a distance, usually present a very pleasing appearance. This is particularly evident in many evergreen trees and shrubs. They have such fine, thick leaves that from a distance the trees appear like a solid mass as in the Spruce, Pine and Cedar. Leaves which are more widely spaced on the branches reflect more light than those more closely set, and present a brighter appearance from a distance.

The coloring of leaves is very important, particularly in group planting. Dark shading creates an appearance of a

solid sombre mass, while lighter tones present a bright and cheery impression.

The most common shadings of green in leaves are blue, orange and grey. The grey-green is commonly found in the *Willow* (*Salix alba*), *Poplar* (*Populus*), *Russian Olive* (*Elaeagnus angustifolia*) and *Engelmann Spruce* (*Picea Engelmannii*). We also find leaves with a reddish green tint in the *Maple* (*Acer*), and *Cotoneaster* (*Cotoneaster*).

Special colors are acquired by some leaves in the autumn. Beautiful shades of orange, red, yellow and ochre are seen. The deep blue green color of the leaves of *Norway Maple* (*Acer platanoides*), *Ohio Buckeye* (*Aesculus glabra*) and *Lilac* (*Syringa*), changes to orange with shades of carmine. The orange leaves of the brightly-colored *Bowelder* (*Acer Negundo*), *Eastern Larch* (*Larix laricina*), *Birch* (*Betula*), *Spruce* (*Picea*), *Spirea* (*Spiraea*) turn to orange ochre, and the grey-green leaves of the *Silver Maple* (*Acer saccharinum*), *White Poplar* (*Populus Alba*), *White Willow* (*Salix alba*), and *Russian Olive* (*Elaeagnus angustifolia*) acquire many shades of orange and yellow.

One must keep in mind also the added attraction of color in the bark of various trees. Picture the beauty of the bark of the *Redosier Dogwood* (*Cornus stolonifera*), or the *Siberian Dogwood* (*Cornus alba sibirica*) against the white background of snow in the winter, or even the rough bark of the *White Birch* (*Betula papyrifera*).

The presence of blossoms and fruit on some trees is of great importance. On many, the blossoms appear even before the leaves are out. These include the *Korean Golden Bell* (*Forsythia ovata*). Some of these blossoms fill the air with a lovely



A branch of the Redosier Dogwood  
(*Cornus stolonifera*), with white fruits.

scent. One of the examples is, of course, the *Lilac* (*Syringa*).\*

Thus we see that shrubs and trees of different varieties have special characteristics. An exceedingly tall tree attracts attention by its very height, and in a group of small trees, it breaks the monotony of the perspective.

Trees or shrubs which grow round are especially valuable for planting on the ends or edges of group planting because they help to form a pleasing and symmetrical appearance.

Generally, large-leaved plants should be located at the rear of the house while plants with smaller leaves should have a place at the front. Keep in mind, also, that it is desirable to plant large-leaved plants near large buildings and small-leaved plants near smaller buildings. The location of plants with varied leaf sizes should be carefully planned in order to main-

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\* The names of the plants here are given in both English and Latin, because only the colors of the leaves distinguishes each particular variety.

tain a balance in harmony. The large leaves often tend to overshadow a small-leaved plant in a manner similar to that which we sometimes find in a poorly balanced choir, when a rasping bass voice overpowers the delicate soprano section. Planting should be so planned that the finished appearance will create a harmonious whole, rather than a glaring discord of shape and size.

In landscaping a lot, it is most essential to plan the location of each tree, shrub and other plant. Of equal or greater importance is the selection of varieties suitable to the location and climatic conditions. Too many people purchase plants from high pressure salesmen — plants which are not suitable for the area. This results in a loss not only of money but in valuable time, before establishing the desired results.

In selecting varieties of trees, shrubs, vines and other plants we should make use of the available flora of our own country; which is both varied and most beautiful. We must make the proper selection, plant in a suitable location and then give the proper care. The development will depend on the natural form, age, location and climatic conditions, such as sun, temperature and winds.

The planting on a house lot may serve as follows:

1. To provide necessary shade in summer heat.
2. To mark the boundaries (by hedges, etc.) and thus to create a certain amount of privacy.
3. To make the house a part of the land, creating the illusion that the house itself is growing from the soil.
4. To include the necessary sustenance for the plant life itself from the soil.
5. To create a marked landscape of the beauties of nature.



## Planting

(Refer to ill. 4, p. 35)

When planning the actual planting of the lot, one must be careful not to have too many trees or shrubs, so that the house itself will not be hidden when the growth matures. Usually we plant one tree, to the right of the front entrance, and approximately 20 feet from the house. This will provide a shady spot when the tree matures. This is particularly important on a small lot. There should be a minimum of flower bed space in the lawn. Too many brightly-colored flowers tend to detract from the appearance of the house and the green of the lawn.

The presence of flowers must harmonize with the whole layout. Flower beds are usually planted at the back of the house in certain places, such as bordering a fence or as a base for a group of shrubs.

Generally, a clear expanse of lawn creates an impression of size in the same manner as moving furniture against the walls of a room tends to make the room appear larger.

One of the most suitable trees for planting at the front is the American Elm (*Ulmus americana*). This is a great tree which grows as high as 60 to 80 feet and from 3 to 4 feet wide. In an open place it will spread its branches in a beautiful wide crown. The bark is dark brown and rather rough. This tree is also most suitable for planting along city streets and in parks. It grows very rapidly. It adapts itself readily on transplant-

ing, even when quite large. It develops a sturdy root system and is seldom uprooted by winds. When planted individually, elms should be spaced 60-80 feet apart.

Other trees available for planting are:

1. *Green Ash* (*Fraxinus pennsylvanica lanceolata*). It grows to 60 ft. in height. It is drought resistant, grows slowly, is long-lived, and is used extensively in shelter belts.

2. *Paper Birch* (*Betula papyrifera*). It grows to 100 feet in height. It is a lovely tree with a bushy crown. The bark on



Cutleaf Weeping Birch (*Betula pendula* var. *gracilis*)

the trunk is white and tends to peel in wide strips. The leaves are large and hard. It grows rapidly and the life span is up to 50 years.

3. *Cutleaf Weeping Birch* (*Betula pendula* var. *gracilis*). This is a beautiful tree which grows to 60 feet in height. The bark is white and peels in strips. The branches hang down and, when new, they are covered with rough white nodules. All species of birch are among the most desirable in landscaping on small lots as well as in larger parks. The desirable characteristics of these species are the attractive bark, the early leafing, the lovely shape of the crown, economy of space requirements, and the hardiness against drought. The birch is a ray of sunshine wherever it grows, whether it be among other leafy trees, or evergreens, or as an individual on a lawn. The crown may be trimmed only while very young.

4. *Little Leaf Linden* (*Tilia cordata*). This is a lovely tree with a symmetrical crown. It grows up to 100 feet in height. The old branches are bare, shiny and olive-green in color. The leaves are small, green on the upper side with a shading of light blue on the other side, and with a grey fuzz at the corners. It has a light yellow flower which blossoms in July. It grows quite slowly. The linden tolerates shade well, but requires a rich damp soil. This species is one of the finest landscaping trees for planting on lots, parks, and for lining streets and boulevards, particularly because of its exceedingly long life span. It has been known to live up to 300 years. The crown can be trimmed even when the tree is quite old. When planted alone, it develops a low growing crown and gives a very effective appearance. The flower of this tree is useful in medicine and is very attractive to bees. It has been estimated that the linden will yield from 1 to 5 tons of nectar out of two and one-half acres.

At the foot of this tree it would be desirable to plant a perennial flower, such as the *Lily of the Valley* (*Convallaria majalis*). This grows from 3-5 inches in height and has a small bell-shaped flower. It blossoms in late May or early June and, when it has finished blooming, the flowers are replaced with small red berries. It grows best in a low shady spot and requires a rich soil. For propagation the root may be divided in September or October. The Latin name is given to it from the fact that in the wild state the plant is found in low lying areas.

Another flower which may be planted at the foot of the linden is the *Common Periwinkle* (*Vinca minor*). The branches grow along the ground and sprout rootlets. Thus the plant spreads. The leaves are evergreen and shiny. The blossom is a light blue. The evergreen grows in almost any kind of soil, but prefers a shady location. It is easy to propagate by dividing the self-rooted branches. The Latin vincire means to tie, describing the pliant branches which do not break easily. They are always green.

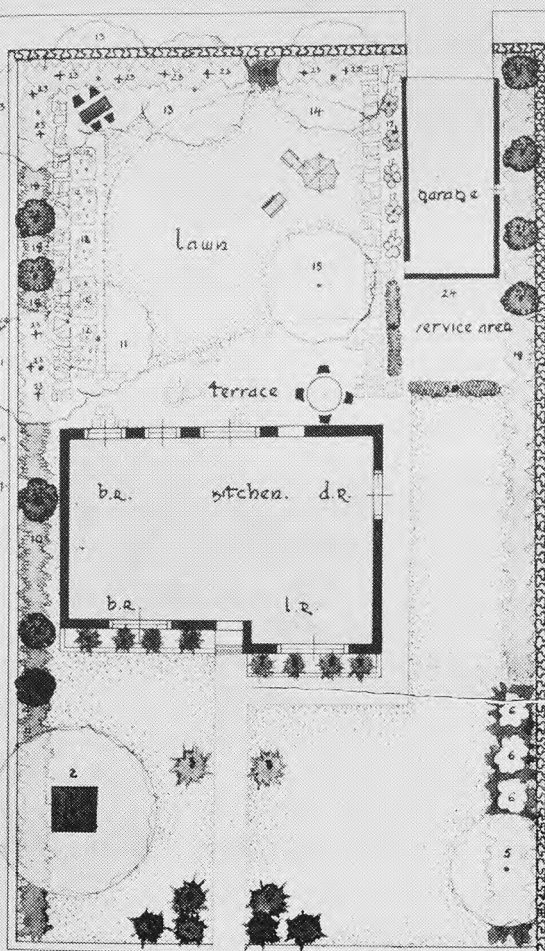
Further, to obscure the public area or the frontside of the house, or to formulate a balance with tree No. 2 on the opposite side of the public area, it is essential to plant to its left another tree of smaller stature, preferably No. 5. The *Pyramidal Crabapple* (*Malus baccata pyramidalis*) which reaches a height of 25 feet and its roots extend to a distance of four feet. It has white blossoms. The fruit is very smooth and golden yellow but will ripen into reddish colour in the sun and will remain on the tree for a long time, thus decorating the tree itself. It will also withstand frosts. New plants will start from the seeds of the fruit, therefore it is necessary to see that all fallen fruit and seeds are cleaned.

A good substitute for the *Pyramidal Crabapple* is the *Red Fruited Hawthorn* (*Crataegus sanguinea*) which reaches a

# land/cape plan for small house

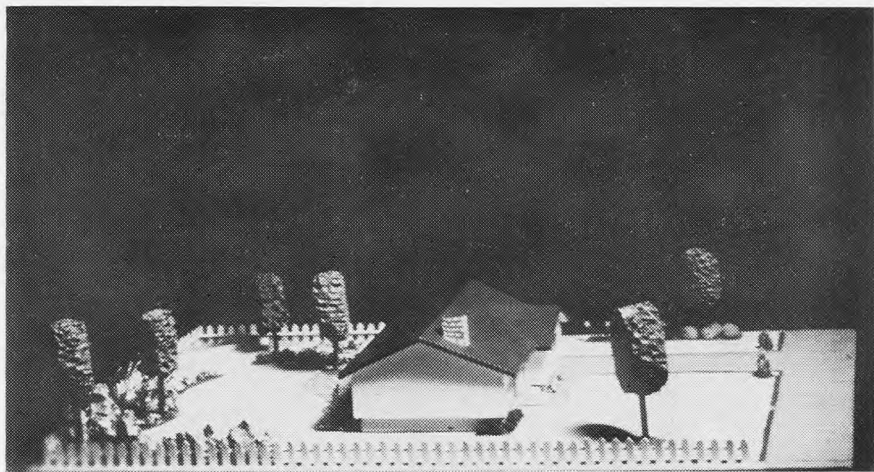
## planting list

1. coxallipia
2. betula pendula, gracile
3. juniperus sabina
4. juniperus horizontalis
5. Malus baccata, pyram.
6. Pyrus crabapple
7. yrtinda (varietal)
8. juniperus chinensis pfitz
9. juniperus horizontalis
10. holly olive, aucuba
11. ulmus americana
12. flower
13. quercus macrocarpa
14. eleagnus angustifolia
15. holly
16. parthenocarpus
17. climbing rose
18. viburnum trilobum
19. yrtinda oblata
20. clematis
21. prunus nigra
22. Malus (varietal)
23. (varietal) spirea
24. vegetable garden



Ponufrych  
landscape architect

1964



*Model of Landscape Plan for a Small House (side view)*

height of 15 to 20 feet. Its foliage is shiny dark, or rusty red, and bears long thorns. The white flowers bloom in groups and cover the branches. The deep red fruit is soft with a hard stone center. This tree will grow well, but will not withstand much draught. There are approximately 1000 varieties of this *craetagus*.

Alongside tree No. 5 (the front and at the back), it is suggested that a low decorative shrub No. 6, *Persian Lilac* (*Syringa persica*), be planted. It grows to a height of 5 feet and its branches thinly. Its bright lilac-colored blossoms are fine and delicate with a very superb, potent perfume. Generally this is a decorative shrub, and its origin is China. Many years ago it was brought to Persia where it has gone wild.

A substitute for No. 6 *Persian Lilac* is the *Germander Spiraea* (*Spiraea chamaedryfolia*) which grows 5 to 6 feet high with bent branches. It blooms in a mass of white flowers. It grows in most places and its growth is rapid. It displays a great deal of brightness, and is very suitable for a summer hedge.

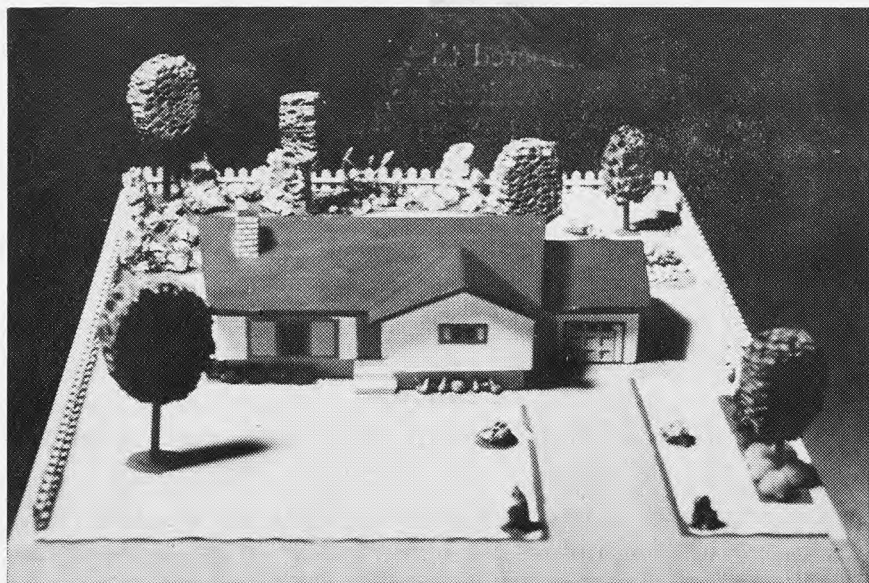


Another low shrub is the *Bumalda Spiraea* (*Spiraea bumalda*). The branches grow straight upward. *Spiraea* bloom in a variety of colors, mainly in the second part of the summer. The two widely known varieties of this group are the

1). *Spiraea bumalda* var. *Froebelii* — which blooms in large blossoms of scarlet red.

2). *Spiraea Bumalda* var. *Anthony Waterer* — The shrub is of the low type, and its branches are covered with tiny hair-like fuzz. This is one of the most beautiful low type shrubs. The blooms are dark red.

Regarding the plants to be planted along the foundation of the home, it is very essential to take care that tall shrubs or trees are not used in the front of the house. It is most important to avoid such growth next to the windows, as eventually such shrubs or trees grow and spread, covering the windows. This



Model of Landscape Plan for a Small House (front view)

will not add to the beauty of the home, but rather show unbalance and develop into a crowded condition when mature. It is vital to display their natural growth, showing harmony between the plants and the grass and provide enough natural environment as if the house emerged from amongst the plants.

Low-growing shrubs and plants are to be planted next to the house and between windows. Next to the corner of the house, or next to the doorway, some Pyramidal form of shrubs may be planted. Number 7 *Pfitzer Juniper* (*Juniperus chinensis* var. *Pfitzeriana*) is well suited, and is a very hardy ever-green. The branches grow low and tend to point downwards. The needles are bright green and most outstanding. They all favour sunlight and sunshine, but are not easily transplanted.

Another suitable shrub to be placed on No. 7 is *Ware's Arboritae* (Cedar) (*Thuja occidentalis* Wareana).

It must be remembered that both Junipers and also the Cedars, in landscaping architecture, have great meaning. They form a crown very easily, but are most outstanding as an ever-green hedge. Along window No. 8 the *Creeping Juniper* (*Juniper horizontalis*) is very suitable. This is a wide, spreading shrub with branches spreading along the ground. The needles are very tiny, strongly attached to the branches, and dark green. The berries blush in color. This type of Juniper grows well in all places, even in sand and rocky places. In the same place it is possible to grow *Savin Juniper* (*Juniperus sabina*). It reaches a height of 2-3 feet and grows in a very spreading manner. The needles are very small, fine, and dark green. When you crush them, they present an unpleasant odor, and this is due to their poisonous oily juice. It grows everywhere, and withstands frost. At the corners of the house, it is wise to

plant the *Rocky Mountain Juniper* (*Juniperus scopulorum*). It grows from 6-10 feet in a pyramidal form with blush-green leaves and fruit.

In No. 9, the *Red Elder* (*Sambucus racemosa*) is suitable. It grows four feet high with twigs and branches that are bright bronze. In early May when the leaves are budding, the light golden blooms appear. The fruit is scarlet red, and grows in all places. In general, this is a beautiful shrub, particularly when it is covered with fruit. It grows well in dry areas and loves sunlight. Its growth is started from a seed which is planted in the fall on the garden or lawn area. New plants grow very rapidly. It has a positive advantage, whereby pests do not devour its leaves.

In No. 9 another suitable shrub is *Tatarian Honeysuckle* (*Lonicera tatarica*). It grows tall up to 9 feet. It blooms early in spring in abundant red and white flowers. The berries are red and oval. When it blooms, or bears berries, it looks remarkably well. It is not particular as to where it is planted, because it does as well in the sun, as in the shade.

In the corner along the walk as No. 4, it is wise to plant three shrubs along each side of the same type, a low *Juniper* and particularly the *Creeping Juniper* (*Juniperus horizontalis*) which has been previously mentioned.

Not too far from the house, on each side of the walk No 3, it is suggested to plant both of the same type and variety, the *Savin Juniper* (*Juniper sabina*). This also has been previously mentioned.

To separate your area or lot from the neighboring one, plant a hedge on the boundary. On the west side of the house, plant *Siberian Elm* (*Ulmus pumila*). These trees or hedges, will grow according to their formation. When you form them as trees, they may grow up to 75 feet tall. The branches are

thin and somewhat bent, with leaves that are hard and shiny on top, and dark green to bright green underneath. They grow in all areas, and are particularly fond of sunlight.



A branch of the Siberian Crabapple (*Malus baccata*) with fruits.

Beyond the hedge on the west side, as an ornamental or a flowering tree No. 22, the *Siberian Crabapple* (*Malus baccata*) is suggested. It grows to a height of 15-20 feet, has somewhat bare branches, and blooms in white with an aromatic perfume. The berries are oval and yellow, but turn red in the sun. It withstands frost very well, and grows in all areas.

Along the back of the lot, and in the south west corner, No. 13, a suitable tree would be:

1. *Bur Oak* (*Quercus macrocarpa*). This beautiful tree has leaves which are shiny on the top surface, and the bottom surface is covered with white fuzz. It forms a wide crown.

2. *Pincherry* (*Prunus pennsylvanica*). This is a wonderful tree or shrub which grows up to 40 feet high. It is easily distinguished, as it is characterized by a reddish bronze, shiny



*Bur Oak (Quercus macrocarpa)*

bark which never changes throughout its entire life. In the fall the leaves are yellowish-red. The blossoms are in a white, rosette form of 2-5, and the fruit is small and shiny red. It grows very fast and does well in all areas.

On the North side next to the back of the garage No. 14, suitable trees are:

1. *Russian Olive* (*Elaeagnus angustifolia*). It grows 20 feet tall. Young branches and leaves are covered with a fine white fuzz, giving it the appearance of silver white. The bark on the main trunk is a dark brownish grey. The branches bear needles. The fragrant blossoms are silver on the top and orange-yellow inside. The blooms appear in May. This variety grows fast in all places, does well in the sun, and withstands dryness well.





*A branch of the Native Plum (Prunus nigra) with fruits.*

2. *Canada Plum* (*Prunus nigra*). This grows up to 15 feet tall. The crown is thick. In spring the white blooms hang down. It has dark purple fruit later.

3. *European Mountain ash* (*Sorbus Aucuparia*). It grows 30 feet tall, and has a smooth brown bark. It has white blossoms that grow in clusters. The orange fruit, when mature, becomes a scarlet red cluster and remains for some time on the tree to provide good food for birds. It withstands frost well and grows in all areas. It is particularly outstanding in the fall when the leaves turn purple.

Next to the terrace No. 15, it is necessary to grow a tree not only for shelter but for refreshing shade. A suitable tree would be:

1. *Little leaf Linden* (*Tilia cordata*) which was previously mentioned.

2. *Ussurian Pear* (*Pyrus ussuriensis*). It grows up to 15 feet tall, spreading thick and wide roots. The annual branches



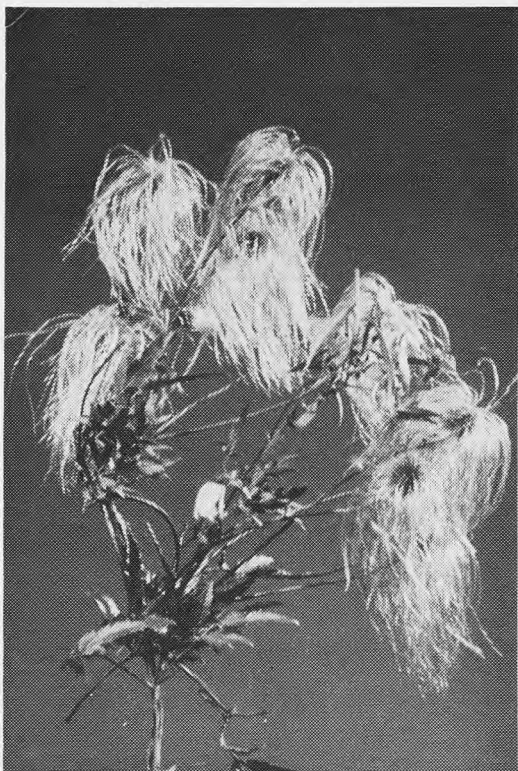
are yellowish bronze, but, when 2 years old, they turn reddish-bronze. The leaves are shiny. It has white flowers that grow in thick clusters, and have a sweet perfume. The fruit is greenish-yellow. Another more decorative variety is the pear. It is frost resistant and prefers much sunlight.

Next to the garage, between the walk and the edge of the property No. 21, it is wise to plant roses. The *Therese Bugnet*, flowers deep pink. Double, long season of bloom, is excellent for use on arbor trellises, or along the fence. The blossoms come in large clusters and the foliage is very glossy and a deep rich green.

To separate the service area No. 24 from the rest of the graden, have the plants form a wall, and the best variety for this at No. 16 is the *Virginia Creeper* (*Parthenocissus quinquefolia*). It creeps high, grows very well and is frost resistant. It grows everywhere, even in the shade and it will climb on a meshed wall. It has a lovely appearance, particularly in the



A branch of the European Mountainash (*Sorbus aucuparia*) with showy in fruits.



A branch of the Golden Clematis (*Clematis tangutica*) with feathery fruits.

fall when its foliage turns purple. No. 20, the *Golden Clematis* (*Clematis tangutica*) grows to a height of 10 feet. It is a valuable creeping plant, and it needs some type of support. Its yellow blooms are outstanding and it blooms until freeze-up. It is frost resistant.

On the east side, to separate the property from the neighbor, it is wise to plant a hedge such as; —

1. *Korean Early Lilac* (*Syringa oblata dilitata*). It is a wide growing plant with pinkish-violet blossoms which grow in

clusters. In the fall the lilacs appear gorgeous when their leaves are of emerald color. They grow in light soils and are frost resistant. All varieties of lilac used in landscaping belong to the choice shrubs. The blooms produced by these shrubs are always attractive.

2. *Peking Cotoneaster* (*Cotoneaster acutifolia*). It grows from 5-7 feet high in a wide fashion. It has pink blooms and black berries. Among the hedge bushes, on the east side, between the garage and the neighboring boundary line No. 21, it is recommended to plant one of:

1. *Canada Plum* (*Prunus nigra*) which was described previously.

2. *Black Chokecherry* (*Prunus virginiana melanocarpa*). It grows to a height of 30 feet, has small white blooms, and its berries turn dark purple. This tree will grow well in sunlight or shade. It will withstand frost and drought. On the west side, to shelter the terrace, plant No. 11 two tall trees as:

1. *American Elm* (*Ulmus americana*). This beautiful tree was described previously.

2. Another substitute for the American Elm may be *Golden Willow* (*Salix alba vitellina*) which grows 15-25 feet tall. It displays a wide crown drooping downward. It blooms in May. The branches are a glossy bright yellow, and the underneath of the leaves is bluish-green, covered with fuzz.

At the back, towards the northerly section, besides the trees No. 13 and No. 14, plant a shrub so as to form a hedge and at the same time to separate the lawn. These shrubs, in the summer months with their foliage, blossoms and berries, decorate the back part of the garden. Arrange your trees and shrubs in such a way that, along the boundary line and in the corners, taller plants are planted, then, towards the house medium ones, followed by lower material or flowering plants.

Therefore, plant trees from 6-8 feet apart. The shrubs may be:

1. *Lewis Mockorange* (*Philadelphus Lewisii*). It is of medium height. It blooms in white, early in spring, with blossoms of a splendid perfume. It grows very quickly in all places, and is frost resistant.

2. *Nannyberry* (*Viburnum Lentago*). This is a tall thick shrub which grows up to 30 feet. Its branches grow upright. The foliage on the upper side is deep rich green. Underneath it is covered with fuzz, and in the fall it turns reddish-brown. The blossoms are creamy-white (ivory) and produce granite-colored berries. This shrub provides much shade. It appears very outstanding when in bloom, particularly in the fall.

Other substitutes are different varieties of lilac, such as:

1. *Amur Lilac* (*Syringa amurensis*). It grows 10 feet tall and very wide. Its foliage is a deep green and it blooms in an ivory color. This lilac withstands harsh winters.

2. *Common Lilac* (*Syringa vulgaris*). It grows up to 20 feet tall and spreads out very widely as it produces many new shoots. The branches are light brown with purple blooms. This tree originated in Turkey.

3. *Hungarian Lilac* (*Syringa Josikaea*). It grows to a height of 12 feet. It is very thick and blooms are dark violet. It is very pretty when filled with clusters of blossoms. This lilac thrives well in most areas.

All these are most suitable in the tall tree line but in the next medium height line, the following are most appropriate.

1. *Oriental Spirea* (*Spiraea media sericea*) which grows to a height of 3 feet, with its branches extended upwards and the ends dropping downward. It is yellow or bronze in color. It blooms early, and its blossoms are white.

2. *Korean Spirea* (*Spiraea trichocarpa*). This grows up



to five feet tall, and its blossoms are white. This is one of the most decorative spirea shrubs.

3. *Threelobe Spirea* (*Spirea trilobata*) is a wide, thick shrub up to five feet tall. The blossoms are white. It thrives best in sunny areas, and withstands frost and drought.

The third row of the low type shrubs which should be planted two feet apart are:

1. *Indigobush* (*Amorpha fruticosa*). It grows to a height of 4 feet tall. It has fine branches and bears a fine fuzz. The blossoms are purplish and in clusters, found at the end of the branches. It thrives well in all places, except the ones which are very dry.

2. *Dwarf Euonymous* (*Euonymus nana*). It grows from 2-3 feet tall. Its branches spread along the ground and some of these runners form roots. It does not shed its leaves for winter but changes its color from green to red. The blossoms are red. Its seeds are very pretty, displaying a pocket with white inside. It withstands drought and grows well in open places.

3. *Bush Cinquefoil* (*Potentilla fruticosa*). It is a thick

shrub which grows up to two feet tall. The bark on the branches is spotted in reddish brown. In the early stage, the branches are covered with a delicate silken fuzz. The leaves underneath are covered with fuzz, and it blooms in a bright yellow.

There are many varieties of this shrub and it is difficult to distinguish them. It withstands very low temperatures, but thrives best in moist and damp areas, in ample sunlight. Plant it in groups, particularly near the tall shrubs, or trees.

To the west of the house, between the sidewalk and the flower bed, to provide the continuance of a hedge No. 10, plant a hedge No. 18 by using *Alpine Currant* (*Ribes alpinum*). This is one of the finest shrubs for medium height hedges. It grows very quickly early in the spring. The blossoms are greenish-yellow. It thrives well in shady areas and is easily trimmed. It is also resistant to frost.





## Sunlight and Shadow

The illusion of distance is the basis of perspective. Sunlight is necessary for most plant life, especially for the brightly colored ones. Shade is tolerated only by selected species of plant life. Bright colored flowers, including red and white, create an illusion of nearness, while the dark hues — black, dark green and dark blue appear more distant. In creating a small plantation, bright colors must predominate. When it is desired to create an illusion of wider spaces, the bright colors must be properly mingled with plants of darker shades of color. Sunlight and shade create impressions of varying topography on the surface of the land.

In the garden, shadows are created by the changing position of the sun. Exposure of plants changes throughout the day. A garden exposed to the south or east is exposed to the sun in the morning, while a garden exposed to the north or west catches the rays of the afternoon sun.

To create an illusion of distance, trees with dark green leaves should be planted beyond a planting of trees with brightly colored leaves. Shades of white, yellow and orange tend to push back the greens, while shades of violet, black or brown make the greens appear nearer.

In planning our landscaping, we must also keep in mind the height of mature plants.

Tall trees shorten distances, while low shrubs and trees

increase distances. A tall narrow poplar, growing beside a house makes it appear smaller, while a low growing lilac bush in the same spot will make the house look larger. If you plant a compact group of trees and shrubs at one end of a small body of water, it would appear much larger. All large trees take on an appearance of grandeur when viewed from a distance.



*A branch of the Silver Maple (Acer saccharinum)*

Uniform plantations are monotonous and boring. Especially attractive against a solid background are the white birch, the green Mountain Ash with its feathery leaves, the Aspen with its purple leaves, the Blue Spruce, and the Silver Red of the Silver Maple. Scattered individual trees or small groupings properly spaced are much more attractive than a solid, monotonous plantation of one height.

Especially attractive are plantations of shrubs and trees when they naturally form contrasts in colorings of leaves and trunks as well as shapes of the crowns. Pyramidical shapes form a contrast to round or oval plants; dark greens with light-

er shades and the tall trees always stand out at the edge of a lake. Especially striking is the pointed spruce, growing side by side with a curly birch or a Weeping Willow.

The contrast created by trees of various shapes or colors side by side always catches the eye and draws forth the appreciation of the beauties of nature.

On the subject of trees, some of the great minds of the world have expressed themselves thus:

*"I think that I shall never see  
A poem lovely as a tree."*

*"Poems are made by fools like me,  
But only God can make a tree."*

JOYCE KILMER

*"These groves were God's first temples, ere  
man learned to hew the shaft and lay the archi-  
trave and spread the roof above them — ere he  
framed the lofty vault, to gather and roll back  
the sound of anthems in the darkling wood  
amidst the cool and silence, he knelt down and  
offered to the Mightiest solemn thanks and  
supplication."*

BRYANT



*A branch of the Green Ash,  
(Fraxinus pennsylvanica lanceolata), with fruits.*

Plantings of dark shaded trees should be set off with planting of trees with brighter hues such as the Birch, Larch, Maple and Green Ash.

The taller shrubs such as the cranberry, honeysuckle and caragana should be covered at the base with a low growing one such as the cotoneaster. A lovely addition to the planting of any house landscape is made by including plants which inject a touch of color in the autumn, such as the carmine of the burning bush and the Red Maple; the violet shades of the Red Elder, Cotoneaster or Siberian Dogwood or the bronze tones of the Bur Oak, Honeysuckle, Rose and Birch. Berries of various trees and shrubs add a touch of color; white on the symphoricarpus, coral on the cranberry bush, dark — almost black on the cotoneaster; dark shades of red on the Mountain Ash and the Rose; a brighter red on the hawthorn; pink on the honeysuckle, and silver grey on the Russian Olive.



*A branch of the Dropmore Scarlet Honeysuckle (Lonicera) with blooms.*

Particularly striking is a group plantation of blossoming shrubs of varieties which bloom at different periods throughout the summer. For spring blossoms the following are recommended; Saskatoon, Bird Cherry, Spirea, Lilac, Mountain Ash, Honeysuckle. For early summer blooms, we have the Carragana, Mock Orange and the Rose.

For a decorative touch on walls and verandas we have perennials, such as the native grape and golden clematis, as well as annuals, such as the nasturtium and the sweet pea.

We must avoid planting too many trees and shrubs near the house, particularly at the front. Trees and shrubs are planted when quite small. When they mature, they grow to such an extent that they often detract from the appearance of the house.

Evergreen trees and shrubs are most effective and very tolerant to frost damage. When planted in a group, they form an excellent dark green background for other plants. The pine and the spruce make an excellent windbreak. The sound of the

wind sighing through the boughs adds to our enjoyment of them. Their appearance may be somewhat thought-provoking and melancholy, but their presence adds a great deal to a landscape.

Evergreen trees require a somewhat acid soil, and a little more shade than other plants. Evergreens, particularly the short varieties, should not be planted beneath leafy trees. Water dripping off them could damage the needles.

Short growing evergreens are particularly effective near the foundation of a house. Among these varieties are the *Juniperus Savin* and *Mungo Pine*.

Generally speaking, it is important that, particularly in a small house landscape, we have abundant sunlight and colorful flowers, properly located.

There is no one on Earth who does not like flowers and who is not, in some way, interested in conversing plant life. A little child, still in its crib, when it sees a blossom, stretches



*A branch of the Black Cotoneaster (Cotoneaster melanocarpa) with black fruits.*



out its tiny arms and laughs with joy. When grandmother looks at a flower, she sees its beauty and hopes that she may live many years to enjoy it. Sick people forget their aches and sorrows for a while, and along with everyone else they enjoy the beauty and happiness that flowers add to our homes throughout the entire year.

A flower is a symbol of hope and a symbol of youth. It is a necessary part of a person's everyday life. Flowers inspire a person from his very childhood and they develop in us a sense of beauty. Flowers, which were created by God, are blessed with many qualities — their wide range of colors, the geometric symmetry, form and perfume. The "Queen of the Spring" is the flower. Just like a "Little Bell" it helps the sun to awaken all things to life anew. Overworked people, tired after a day's labor, seek peace and quiet among the wild and domestic flowers.

In all Christian lands, people use flowers to adorn their churches and other public places. Flowers are to be found in rich palatial homes and, likewise, in the poorest of dwellings. Both, rich and poor, love and cherish plants and especially flowers.

According to Greek Myths, flowers have a very old and interesting origin. One of these legends relates that the goddess of blooms and beauty, Venus, sprinkled the growing plants with "The drink of the Gods" — "Nector" which is considered to be the giver of everlasting life and youth, and, as a result, the plants blossomed out in all their glorious colors. The goddess hid this nector in such a way in each particular bloom that only insects such as the bee can get it and put it to good use.

The Roman poet, Ovid, has the following to say about the origin of flowers. The Goddess of the Woods and Mountains who was the beautiful nymph, Clitia, fell in love with Apollo,

the Sun-God and the sender and stayer of plagues. Longingly, she waited for his love, but Apollo paid no attention to her and so, downhearted and very sad, she came down to earth and became a plant. Her facial features were transformed into a beautiful purple violet.

A similar legend is written by Ovid regarding the narcissus. There once lived a handsome youth, for vain love of whom the nymph Echo died. Memesis caused him to fall in love with his own reflection in water. He pined away in desire for it and was changed into the Narcissus.

There are many other similar accounts about the origin of flowers and to tell about them all would require a complete volume. Flowers were also of a great significance in man's religious life. People lived with them and they helped man to understand his being. Notice carefully how mysteriously living things on earth are formed. Every tiniest thing, and especially flowers, are put together with the greatest of care and wisdom.

The greatest of the teachers who stressed the importance of flowers to man were the founders of the very old religions. They foresaw a happy and everlasting life in beautiful flower gardens. Gautama Buddha and his followers proclaimed that escape from liability to suffering and from mortality and earth were the highest goals attainable, and that the true and happy life after death awaited them in gorgeous flower gardens.

All religious groups had and still have their chosen flowers which they regard as symbols of beauty, goodness and truth. These selected flowers have become incorporated into the decoration of public places; in the painting of ornaments; in embroidery and tapestry work; in art and in mosaic. All in all, since flowers mean so much to us in so many ways, it is important that we see to it that they grow well and this requires the best of care and knowledge on our part.

In ancient times certain flowers of outstanding beauty and symmetry of form held and continue to hold a very important symbolic meaning in the cultural and religious life of many nations. In the Old Testament and especially in the Songs of Solomon, flowers are often mentioned.

Many years ago, Egypt was renowned for its floral beauty and its architecture and also its sculpture which is still to be seen today. An important flower in ancient Egypt was the lotus — the water lily which the Egyptians regarded as the symbol of the sun because it opened its petals to expose its beauty at daybreak and closed its petals again at the close of day. It was also regarded as the symbol of innocence and modesty by both the Egyptians and the Greeks. The Hindus also had a similar holy and important significance for the lotus because they believed that their God Brahma was born in one. As a result, the Hindus used the lotus to adorn their buildings.

In Japan, the lotus was a symbol of cleanliness and purity while the chrysanthemum was used as a royal crest, and in its honor the Japanese held an annual festival. A similar festival is held annually in Persia to show the love for, and to honor, the rose.

Certain flowers were used for various purposes in many of the old lands. The City state of Athens used the violet as its emblem. Whenever an Athenian became ill, the people hung a branch or spray of laurel or purging buckthorn on his door. When a person died, the people threw parsley into his tomb and a lover showed his love for a maiden by adorning her front door with various common flowers.

Just as important a significance was attached to flowers in old Rome. Young couples who were being wed had a crown of flowers placed upon their heads and the groom's doorway was also decorated with gorgeous blooms. The festival in honor

of the Roman goddess of flowers "Flora" lasted for five days. The Romans considered the rose as a symbol of secrecy, and when guests noticed a rose suspended above a table, it meant that their conversation was to be in strict confidence.

During the Middle Ages, flowers were further adopted as political emblems and national symbols. In the 12th century flowers were included as part of the coat of arms of the English noble families. The most commonly used flower in Heraldry was the Iris which became the official emblem of the Kings of France in 1179. Also, about this same time, there was a long struggle between the imperialists and the Pope. The soldiers of one army wore a white lily while the other soldiers displayed red lilies.

In the 13th century, the English King, Edward 1, adopted the rose as his official floral emblem. Later, other British monarchs adopted roses of other colors as their emblems. During the latter half of the 15th century there was a struggle for the British throne, known as the war of the Roses. From that time on, the rose has been the official emblem of Britain.

In addition to these, many other nations have legends concerning the manner in which certain flowers were selected as their emblems. The common Bachelor Button is the national floral emblem of Germany. According to legend, it was chosen when Louisa, the Queen of Prussia, was escaping from Berlin during the Napoleonic Wars. She picked this flower from the field and made little garlands, and in this manner she amused her children.

The white clover, with its three leaflets is the national emblem of Ireland because, according to legend, St. Patrick used it to help him teach the Irish about the Holy Trinity. The lily is the national emblem of Italy, and the tulip is the

flower of Holland, while the cactus is used by Mexicans as their floral emblem.

Flowers must be properly planted. It is particularly important to properly organize the harmony of their colors.

It is well known that the basic colors that make up the spectrum of sunlight are red, orange, yellow, green, blue, indigo and violet. If we join the light shade of the blue with the bright indigo we shall have six basic colors.

Red, orange and yellow are warm colors, while green, blue and violet are cool colors. The first three tend to shorten the perspective while the latter three lengthen it. White and black are natural colors.

When white flowers are used in a flower bed to set off red and blue blossoms, the general impression will be a pleasing one. White always emphasizes and sets out other colors, particularly dark shades such as blue, violet or brown. A grey background tones down bright colors. That is why bright, colored flowers are especially attractive when growing amongst grey stones. That is why a red rose is so attractive among its green leaves. The violet marchmallow, among the yellow pinewood cornflower, is so pleasing to the eye. The white phlox makes the best background for flowers of all colors. Flowers set out in a bed, surrounded by a green lawn, are especially attractive. The green of the lawn sets out flowers with warm tones, particularly the shades of red.

Annual flowers are planted in the spring by seeding, or transplanting of bedding plants. Perennial flowers are planted in the autumn or in the spring. Plants should be set out in well prepared soil containing a mixture of rotted manure or compost. They must be planted by hand, about one inch deeper than they grew previously, by spreading the roots in the holes and packing the soil around them.

Bulbs of flowers such as tulips, narcissus, etc., should be planted at a depth  $2\frac{1}{2}$  times the diameter of the bulb.

Spacing of bulbs should be as follows:

Tulips — 5 to 7 inches; hyacinths — 6 to 8 inches.

Lilies — 3 to 6 inches.

In planting perennial flowers an effort should be made to harmonize their colors. The following combinations are very attractive when growing side by side:

Roses — white and red.

Phlox — violet, red and white.

Iris — blue and red.

Planting should also be planned to provide a continuity of bloom throughout the growing season. The red tulips bloom in May; the blue iris at the beginning of June; Pink peonies in July, white phlox in August; blue sneezewort yarrow in September; and orange common sneezeworts will provide blossoms in October. A plan such as this will provide a riot of color all summer long.

Flowers with varied colorings, and blooming simultaneously, may also be planted for variety. The red cortusa primrose and the blue alpine aster bloom in May. For June blossoms we have pink bleeding hearts and white gas plant. July blooms are provided by blue *Draba* and orange *gaillardia*.

Particularly attractive are groups of rather tall perennials when planted with shrubs as a background and surrounded by green lawn. These include such varieties as peonies, phlox and roses.

The rose is truly a queen among flowers, and it has an ancient and interesting history. Greek mythology tells us that the rose was born from the foam of the ocean, together with Aphrodite, the Goddess of Love.

The earliest references to the rose in Greek literature are





*Rose Peace*

found in the works of **Homer** and **Herodite**. **Plinius** also speaks of roses in his "**Historical Naturalis.**" This shows that roses were also known in ancient **Rome**.

Roses were imported into ancient **Rome** from the **East** and from the **North**. The history of the rose is a part of the culture of the human race — it grows on the soils of half the earth — **India**, **Persia**, **Japan**, **North** and **South** and all of **Europe**. It has also been established that practically every ancient tribe in **Asia** had its own variety of roses. The **Hindus** had the rose **Gallica** and the **Rose Centifolia**; the **Turks** had a yellow rose — (**Lutea**); the **Hebrews** had the **Rose Damascena**; and the **Japanese** had the **Tea Rose**.

Thus we see that the rose is not only the most beautiful of flowers, but has a most interesting history. In planting, it must be borne in mind that the rose is very delicate as to climate and soil, and care must be exercised in selecting suitable varieties.

In general, the planting of flowering plants, the blending of their various colors must be kept in mind, in order to have them harmonize with the whole landscape. Music consists of a motion and blending of sounds. In Nature we have a blending of color and form, in flowering plants. This blending of color and form must be organized to provide a continual riot of color in the garden throughout the growing season. One learns to commune with nature in his own garden, and to understand and appreciate the beauty of nature.

In recognizing the wonders of nature, one may consider the creative capabilities of the human mind and realize the insignificance of human powers and accomplishments.

Mother nature creates for us scenes of varying colors throughout the year. In the Spring we have the re-awakening or re-birth of plant life, and in the autumn the period of rest sets in. This change often comes about within a day and sometimes within a few moments. One spring night is sufficient to present an entirely new scene of green foliage or delicately colored blossoms, while in the autumn we are presented, overnight, with a beautiful display of multi-colored foliage including shades of red and orange, in place of the summer greens. Spring is the re-birth of nature — the dawn of life; autumn represents the farewell of living plants, the gentle falling of the colored leaves, and the departure of the seed from the parent plants.



## Care of Plants

The selection of the right kind of trees, shrubs, and flowers, and planting them properly is only the first step to accomplishing a planned landscape. We must realize that all vegetation, just like children, requires continual and careful care.

An Indian poet, Rabindranath Tagore (1861-1941) composed a poem which contained only these two lines: "*Roots — are also branches deep underneath the soil. Branches — are also roots high in the air.*"

In reality this is true, because the root hairs and leaves supply the food material for all plants: one from the soil and the other from the air. The roots branch out deep into the soil to absorb the water and dissolved minerals; the leaves on the other hand expose their broad blades to the sunlight and absorb the light and gases required for the manufacturing of carbohydrates. A strong branched-off root system ties together the leaves and the stem or trunk of the plant. The root systems and the branch system develop simultaneously: one deep into the soil, the other high into the air. The roots, stems and leaves grow together and are dependent on each other for nourishment. The leaves and the bark shed off the rain water which drips at the foot of the plant and soaks into the soil. The root hairs absorb this water. On a hot summer day the leaves would wilt if they did not evaporate the surplus water that the roots provide for them. Naturally, the roots develop proportionally to the amount of leaves that appear on the plant.

When a certain number of branches with leaves are trimmed off, then, a proportional number of roots stop growing too. The same thing happens when the roots are destroyed, a certain portion of the leaves wilt and dry up. So we see that in both cases, the natural growth of a plant is affected when either one of them is disrupted. The roots and leaves work in harmony for the promotion of natural growth of plants.

It is of great importance that every person should know how to take care of his garden. The plants were started from seeds which push their way into the soil; their tiny root hairs penetrate deep. When these plants are transplanted, a lot of the root hairs are broken off. Therefore, the leaves of the transplanted plants will naturally receive less water for evaporation, thus, they wilt because of lack of soil water on a hot summer day. If the transplanting is done at mid-day when it's hot, the plants may die. Therefore, transplanting must always be done in the evenings when it's cool. If it is hot the next day, try to shade the transplanted plants by cedar shingles or cardboard paper. Decorative perennial plants, especially trees and shrubs, should be transplanted in the fall or early spring when they have no leaves. Spring transplanting should be done before the buds break open, and fall transplanting should take place when the leaves have dropped off, but before frost.

In planting trees and shrubs, make sure you spread the roots out well into the soil. When a tree is transplanted in another place, then, naturally some of the roots and root hairs are damaged by digging it out. The branches must be pruned off proportionally to the amount of root damage or else the leaves will evaporate too much water through them. When it is necessary to transplant an old lilac shrub, then prune the branches to 6 in. from the ground, so that the next spring it

could grow new shoots (which the garden faculty call "rejuvenation of the tree").

A person is able to control and regulate the shape of a tree or shrub by means of pruning the plants in the right places. The stems and branches grow from the tips. If the tree is pruned off the top, then it will have a tendency to spread more to the sides. When the tips are pruned off, a few extra branches start off on its sides. The lower branches become thick and the result is a low thick plant or tree.

In the same manner, by pruning the trunk and lower branches of a young apple tree, it may be developed to have a high trunk and a large crown; or its growth may be regulated by pruning to a low trunk and lower crown. For example, the branches of currants and gooseberry plants may be pruned to have them grow into a form of a tree instead of a shrub.

The newly planted trees and shrubs have to be dealt with in a similar manner. The first year, plants have to be pruned quite low; the second year a little higher, so that the plant develops new and thicker branches. These young plants may be pruned all summer from May to September. If the plant is old, and you wish to revive it, then, you have to prune it at 10 to 12 inches from the ground, and this pruning has to be done in the month of March.

Large fruit trees have to be pruned early, usually towards the end of February or the beginning of March before the sap starts flowing or circulating. Generally, trees are never pruned in April and May, or September and October in the northern latitudes. At this time the greatest sap circulation takes place, and, when you leave an open wound from pruning, a lot of sap may escape and the inside of the tree may start to rot and decay. Then it gets what is called a black heart.

The pruning of rose bushes requires the most care. It

is evident that all the branches have to be pruned, or else the rose bush will not bloom right. The low growing tea or Pekin roses have to be pruned early in spring, and pruned low enough to leave about 2 or 3 buds on each branch or shoot. In strong bushy roses — Remontant, it is necessary to leave at least 10 buds on each shoot at pruning time.

The rose flowers, such as the hybrid tea, floribunda, polyantha and grandiflora are formed the same year as the branches are developed. The amount of branches growing each year and the flowers, or blooms, produced, depends on the amount of branches pruned the previous year. In pruning roses, one must select the healthiest 4 to 7 canes and cut them off at 5 to 6 inches from the ground so that each separate cane may have 5 or 6 buds. All of the old and poor canes should be cut off completely.

Climbing roses develop blossoms on last year's branches, therefore, early in spring one must cut off only the dry canes. The good ones have to be pruned one-third of their length, leaving two-thirds of the cane to grow. When they are finished blooming, then they have to be pruned again to half of the new growth.

Pruning off branches and forming new crowns is not an easy task. This skill must be learned slowly and carefully. When a tree is not pruned and looked after, it may have the appearance of a person who hasn't had a haircut nor combed his hair for a long time. The evergreen trees, like spruces and pines, do not need pruning, unless some odd branch grows out of place and has to be trimmed off. Juniper, Cedar, Retinosporas, Biota, and Arboritae may be pruned in spring or summer because they form crowns without too much difficulty.

In order to grow well, all plants must have these favourable conditions: sunlight, air, warmth, water and fertile soil.



The flowers and leaves develop well on branches that face the sun. The sun-loving trees, like pines, will die if they are deprived of sunlight. The same applies to flowers. To prove this, plant one phlox in the shade and the other one in the open sunlight. The one in the shade will grow to be only one-half the size of the one in the sun. The one in the shade will also bloom much later than the one in the sun.

In locations where there are continuous strong winds, it is necessary to provide a windbreak, or to plant some high fast growing trees to provide this shelter. Fierce winds break off the petals of the blossoms and force the branches to lean in one direction. Even leaves evaporate more moisture in the wind, and then dry up due to lack of moisture. Plants grow much better in sheltered locations where there are no strong winds.

Every plants during its life time grows a stem, leaves, flowers and seeds. To produce these, the plants need certain compounds from the soil. These compounds are continuously being used up, therefore, it is necessary to replace them in the soil by means of various fertilizers. The best fertilizer is the barn yard manure that is well rotted, because it gives humus to the soil. Its work is much slower than that of artificial fertilizers, but it lasts longer. You need from 1 to 1½ tons of barnyard manure to every 1000 square feet of soil. It has to be mixed well into the soil to a depth of at least 4 inches.

In order that bacteria may change the manure into a form that plants can use, it has to be well rotted. But in new locations, these bacteria are not too active before the first of July. In a case like this, it is advisable to use artificial fertilizers which are immediately utilized after application, and are beneficial to plants. However, the usefulness of such fertilizers is of short duration, approximately four months.

## Lawn Grasses

The lawn has a very decorative and esthetic purpose in the home landscape. It is the main feature of landscaping because it provides a setting for trees, shrubs and flowers. Without a lawn, it is impossible to establish any beautiful landscape, just like it's impossible for a master painter to paint a beautiful picture without light. The lawn is the foundation on which the whole landscape is based.

Lawns serve another usefulness, especially in large cities. They help to keep the dust down, therefore, they serve a sanitary-hygienic purpose. Even the smallest lots, boulevards, parks and house fronts should be utilized to planting lawns.

In what way are lawns sanitary-hygienic elements to the residents of the cities?

In all modern towns and cities, the streets are covered with bituminous asphalt, concrete, etc. All these coverings help to create dust. The dust rises during the busy hours of the day. The dusty air is caused by the heavy traffic, and it settles on these bituminous streets.

The situation is much worse on streets which are not covered or oiled. Wherever this dust is raised, it is carried around by the wind and causes great inconveniences. In the first place this dust is harmful and irritating to the eyes and the respiratory organs, and to the general health of all people. It causes many diseases and sicknesses. Medical experience

has proven that every person breaths in from 7% to 10% of this dust and about 50% of it remains in the lungs.

It is a known fact that dust which rises from the filthy streets is full of harmful bacteria which cause such infectious diseases as tuberculosis, bronchitis, diphtheria, etc.

Dust and mist, or fog, cause smog which prevents the natural sunlight from penetrating to the earth's surface and lessens the ultra-violet rays.

Dust is also harmful to all motors and mechanical equipment making it wear out faster. It settles on windows, walls, furniture, etc. It has been proved that both lawns and trees lessen the negative functions of dust and bacteria. The lawns not only hold back the wind, but they help the dust to settle on them. The lawn also prevents the soil from getting too hot on a hot day. At night it prevents the sudden cooling off of the soil. Therefore, lawns regulate the soil temperature.

Secondly, it has been proved by educated people, that the grasses manifest what is known as phytopharmacology and contain certain compounds that have the power to kill harmful bacteria, mushrooms and insects. The actual formation of phytoph in plants is to protect them from various destroyers of plants. Some authorities confirm that the grass which gives off the most phytoph is *Festuca Rubra*. Its presence kills harmful infection (*Glaucoma Scintillans*) in 37 seconds. It has been also proved that *Stylonychia mytibus* is destroyed by this grass in the same manner. It is evident that plants like Thyme (*Thymus*), Phlox (*Phlox*) have sufficient phytoph to destroy harmful elements.

Thus grasses, because of the phytoph functions, help to create a clean and healthy atmosphere, purify the water and soil, and keep them from harmful elements. This process brings about a healthy environment.

It is interesting to know that when a plant is cut or wounded, it is able to give off more phytoph than before. This is true with grasses that have been mowed. This can be sensed by people, especially in the evenings when the air feels so fresh. I may add that a lawn with its green appearance, positively has a soothing effect on the human nervous system, as a the result of the sanitary-hygienic functions.

In front of the house, the lawn must be in the best condition. To be that way it must have:

1. Good fertile soil.
2. Good healthy seed.
3. The best of care.

The seedbed, where grass is to be sown, must have a gradual slope to drain off the surplus water. If the lawn is flooded, the grass smothers because the roots and leaves must have air to breathe.

When a new house is constructed, an excavation is made for the footings and the basement. Then the clay soil is pushed back as fill in. Usually very little of the black top-soil is used to cover this clay. The grass is sown. This type of work is a waste of time and money. The top-soil, when subjected to direct rays of the sun, becomes very active with millions of live bacteria which help to change the minerals in the soil into a state that plants can use. Therefore, the subsoil must be covered with friable garden soil which is mixed with barnyard manure. This topsoil should be at least one foot in depth. After the seedbed has been prepared, it must be leveled. This is usually done by driving four pegs, one in each corner of the seedbed. Then string a cord tightly to all four pegs. You may join the opposite corners. This will show you how level the lawn actually is. In many places you will have to rake and smooth the lawn until it is level.



The best soil for the seedbed is from a farmer's summerfallow, because it will be free from weeds and will contain humus. Humus is a very important element in the soil because it aids the branching of the root systems of grasses. The plants are not able to acquire the necessary minerals from the soil unless it has humus. This humus acts like a sponge which is capable of holding moisture in the soil for some time. The moisture helps to dissolve the minerals in the soil into a state that plants are able to utilize. These minerals are very essential to plant growth. The best sources of humus are the well rotted manure and compost. When these fertilizers (manure and compost) are not available, then you must add 2 pounds of bone meal or well rotted sheep manure to every 100 square feet. If you want a nice lawn, you have to invest in these artificial fertilizers. If the soil is very heavy and clayey, then, lime or sand should be added in the fall to be mixed and broken up by the circulation and penetration of air and water. At the same time, it will enable oxygen and bacteria to spread out and in their turn produce humus.

The soil in the seedbed should be worked very fine because it will act as a covering to prevent the evaporation of water.

The seedbed must then be rolled or packed both ways, lengthwise and crosswise. If you notice any dips after rolling, then, rake it to level it off again. If the seedbed is not level, it may hold surplus water and thus hinder germination and growth by forming ice in the fall and early spring. Packing and rolling makes a good footing for the seeds and at the same time helps to retain moisture in the soil. A well packed soil will bring the moisture to the surface by capillary action.

The lawn must be seeded on a quiet and calm day. It is a good idea to divide the seed into two equal parts. Seed the first part by broadcasting from north to south and the other part from east to west. Seed by broadcasting it close to the ground. A good thick lawn will smother the weeds, while a thin one will encourage their growth. "Important grasses for use in making lawns in these Provinces are Kentucky Bluegrass, Chewing's Fescue, Creeping Red Fescue, Fairway Strain of Crested Wheatgrass and Russian Wild Ryegrass. Kentucky Bluegrass and Chewing's Fescue are capable of making excellent turfs but they have limited drought resistance and are recommended for use only when artificial watering can be given or where rainfall is reasonably abundant. Crested Wheatgrass and Russian Wild Ryegrass do not make closely knit turfs but have great drought resistance and are recommended for use under dry conditions. Marion Bluegrass has done well in some sections of the province but it cannot be given an unqualified recommendation. Kentucky Bluegrass should be seeded at the rate of one pound of seed to 150-200 square feet and Chewing's Fescue, Creeping Red Fescue, Fairway Strain of Crested Wheatgrass and Russian Wild Ryegrass at the rate of one pound to one hundred square feet. The seeding rates recommended are based on the use of good seed. New-crop seed is desirable in the fescues as this seed often deteriorates rapidly.



The best time for seeding in most sections of the province is during the latter part of May or early in June. Setting during the hot dry months should be avoided where artificial watering cannot be practised. On small areas the seed can be raked in with a garden rake. On large areas the seed can be sown with a seed-drill. Where watering can be practiced the surface soil should be kept moist after seeding until the grass appears." (Guide to farm Practice in Saskatchewan).

When a new lawn grows to two or three inches in height, it should be mowed quite high. Never allow your lawn to grow too high because it has a weakening effect on the root system. Make sure that it never grows high enough to produce seed because it would weaken the root system very badly. The lawn should be mowed quite regularly because mowing encourages better growth of the root system. The mowed lawn does not necessarily have to be raked off, unless there is too much cut grass on top which would smother the lawn. It is a good idea to pack after the first cut of lawn, but make sure you use a light hand roller.

Lawns are usually watered too often and too lightly. Light watering, too often, may make the soil sour and thus hinder the chemical process of the soil. It also results in shallow-rooted grass which is unable to withstand periods of drought lasting more than a few days. Each watering should wet the soil to a depth of four to six inches. One of these waterings a week is sufficient.

To promote better growth, better color, a stronger root system and a denser turf commercial fertilizers should be used. "Where artificial waterings can be given, an application of Ammonium Phosphate (16-20-0) at the rate of one pound to 150 square feet or Ammonium Nitrate Phosphate (27-14-0) at the rate of one pound to 250 square feet of lawn surface

soon after growth begins in the spring usually gives good results. The fertilizer should be broadcast evenly when the grass is dry and followed by a watering. A second application may be used early in July. Where artificial waterings can not be given an application of fertilizer shortly before winter sets in or early in the spring is recommended." (Guide to Farm Practice in Saskatchewan).

The sick and poor looking lawns should have a top dressing of compost, well rotted manure or bone meal. One to one and a half tons of bone meal should be applied to every acre. It should be uniformly spread over all the grass area. If it is a lawn, then use 5 to 7½ pounds of bone meal to every 100 sq. feet. Top dressing is very beneficial to lawns and should be applied in the fall before freeze-up.

Other previously mentioned fertilizers may be used even in greater proportions. Such fertilizing may be done every autumn.

When the lawn has taken on its normal appearance it is advisable to use 2 ounces of fertilizer to every 100 square feet. The best time for such fertilizing is immediately after a rain or after watering, or the lawn may be watered after application thereby washing the fertilizer into the soil. Such application may be done June through September. In general, until a lawn has taken firm root, it is advisable to fertilize it well in the fall or in the spring.

To destroy the weeds on lawns, i.e., dandelion and plantain, one must use 2-4-D (one application of it). The best time to use 2-4-D is in late May or early June. The broad-leaved weeds can be controlled by using 2-4-D twice (2 applications of it).

The spraying of 2-4-D must be done very carefully. Equipment used for applying 2-4-D should be kept solely for

that purpose. Spraying 2-4-D must be done on a quiet day when there is no wind, because 2-4-D may cause damage to surrounding broad-leaved garden or orchard plants, roses, peonias and other shrubs and flowers.

Varying shades of light are created by contrasting heights of various plants. In the general view of landscaping, the smooth, green expanse of the lawn constitutes the bright portion, while trees and shrubs, singly or in groups, provide the shade.

In Canada, particularly in the Prairie Provinces, where the winter constitutes such a large portion of the year, we must emphasize the light and warmth of the sun in our home landscaping. To achieve this brightness, emphasis must be on a well-developed lawn.

Great care must be taken to ensure that our plants have the necessary food in the soil. Holes for planting shrubs and trees should be dug in advance (for spring planting dig the holes in autumn) in order that the soil may be loosened and aerated. Nitrogen is necessary for the roots to grow. They breathe even though they are covered with soil.

In digging a hole for tree planting, the top soil should be separated. The hole should be approximately eight inches deeper than the length of the root to be planted. Generally, the hole should be about eighteen inches deep and eighteen inches square.

Before planting the tree, a small quantity of well rotted barnyard manure should be placed in the bottom of the hole. This should then be covered with a layer of top soil, so that the roots do not come in contact with the manure.

In planting a tree, make a little hill of top soil in the excavation over which the roots may be spread. Then cover the roots evenly with top soil and tramp it firmly around the

trunk. Make sure that the tree is not planted too deep or too shallow. The ring should be in line with the soil when the operation is completed (see illustration).

After planting, a slight hollow should be fashioned from the soil and two or three pails of water should be poured into this hollow. This will ensure that all of the roots come in contact with the soil and all air spaces in the soil will be eliminated.

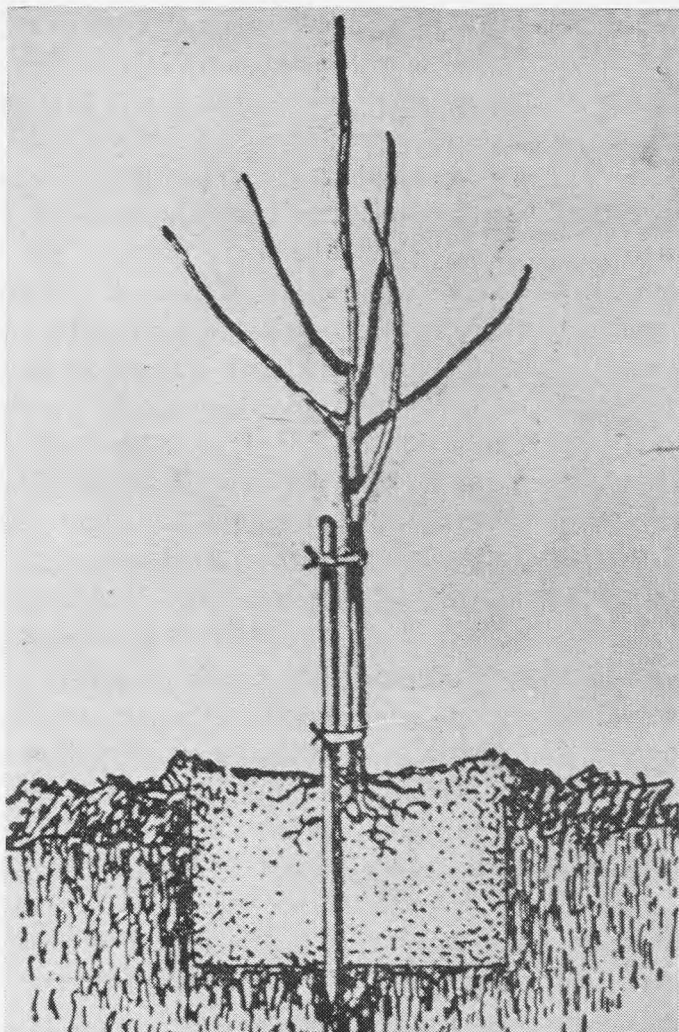
Whenever a tree or shrub is dug up for transplanting, a portion of the root system is destroyed no matter how carefully the operation is carried out. In normal growth, there is a balance between the root system and the crown of the plant, and when there is a reduction in the root system, the plant itself will either fail or even die. It is necessary, therefore, to prune the crown. This should be done so that the cut is on the outside of the branches.

Newly-planted trees should be watered for some time, especially in the spring. The watering should not be done during the hot part of the day, as the moisture will evaporate before it reaches the root. In addition, drops of water on the leaves act as magnifying lenses, damaging the leaves. Water should be allowed to stand for some time to warm to atmospheric temperature.

The soil at the base of the newly planted tree should be kept free of weeds and loose. This retards evaporation and preserves food for the cultivated plant. This will benefit the plant, more than the actual watering itself.

Mulching the soil not only destroys weeds and retards evaporation; it facilitates the aeration of the soil and encourages development of the bacteria which make plant food available for the plant.

The top of the plant should not be watered every day. During a dry spell especially, the hose should be used without



*New Tree Planted*

the nozzle and water should be allowed to soak into the soil at least six inches deep, either in the morning or in the evening.

After watering, when the soil begins to crack, the surface should be mulched again. This stops the capillary action and

preserves the moisture. If washouts occur as a result of watering, these should be filled with soil.

After watering, especially during the first two weeks of July, a covering of moss, leaves or mown grass should be applied. This will provide shade for the soil from the hot sun and will retard evaporation, and keep down weed growth. This type of humus cover should also be used for the winter, particularly in the northern portions of Canada. It prevents rapid freezing or thawing and retains moisture. This type of humus cover is particularly beneficial for perennials, bulbs and evergreens. In the spring, when the material has decayed, it should be mixed with the soil.

Every type of plant, tree, shrub or flower is susceptible to some type of disease, which damages the plant. Damage may also be caused by a lack of proper food or by over-watering. One must watch for this, as the plant, though it cannot speak, has some method of showing that it is suffering.

When the leaves become yellow, this generally is a sign of chlorosis or a lack of chlorophyl. It means that there is a shortage of iron in the soil. When spots of yellow appear on the leaves, starting from the middle of the leaves, this denotes a shortage of nitrogen. When the leaves turn yellow from the edges and die, a deficiency of calcium is indicated. Yellow spots on the veins of the leaves indicate a shortage of magnesium. A greyish coloring in the leaves tells us to add phosphorus to the soil.

Early falling of leaves indicates a shortage of calcium and magnesium. When the soil is deficient in calcium and phosphorus, the plant will not produce seed. Late seed production is an indication of a surplus of nitrogen and moisture. When the proper amount of nitrogen is present, the leaves are usually a healthy dark green and a normal growth is ob-



served. When the coloring of a lawn varies from grey to dark green, an acid condition exists and lime should be added to the soil.

During the summer, when flowers are in bloom, we must continually pick the blossoms to beautify our homes or present them to our friends. This will encourage continual blooming. If the flower is permitted to go to seed, no more blossoms will appear.

Another important item is the destruction of weeds. One dandelion produces 200 seeds and a nettle approximately 100,000. It is easy to see the importance of preventing the weeds from maturing. If they are neglected, they can soon take over the whole garden.

Fallen leaves of trees, and stems and leaves of perennial plants, should be gathered and placed in a compost heap. The soil around the plants should be spaded for the winter.

Remember to cover your roses for the winter. Remove the leaves and fasten down the stems, if they are long. Then cover with sand and dry leaves. Boughs of juniper or spruce should be placed on top of this.



## Insect Pests

One of the most important phases of gardening is the carrying on of a systematic program for control of insect pests. Insects can be divided into two broad categories:

1. Devouring.
2. Sucking.

Among the first are included worms, caterpillars, beetles, and many others. These come in many varieties of shapes, sizes and colors. They all cause damage to plant life by chewing or devouring leaves, stems or fruit.

The best method for control of this type is Derris or spraying, or dusting with DDT. For spraying trees use DDT, 50%, 1 pound in 40 gallons of water.

To protect against borers paint the stem with lime sulphur three times during the growing season, the first in the late spring and the last in the early autumn. If the borer had already crawled into the tree, soak a cotton ball with carbon bisulphide and push it into the hole, then seal it with wax. This will smother the borer.

Sucking insects are of a great variety, including the soft and wingless, called aphid. They suck the sap from leaves and young stems. The plant and leaves attacked lose color and wilt. The insects themselves vary in color but are mostly green. They are generally found in clusters on the under side of the leaf. The best agent for destroying them is nicotine

sulphate or Black Leaf 40, which can be obtained from any drug store. Use two teaspoons to one gallon of water. Add a cupful of fish or vegetable oil soap and stir well before adding the Black Leaf 40. Spray carefully in order to cover the bottom of the leaves.

The presence of lady bugs is often an indication of the presence of aphids. The lady bugs can be observed running up and down the stem of the plants. The bugs themselves are not harmful, but they like the aphid, which gives off a sweet secretion when irritated by the bugs.

Scale insects also belong to the sucking variety. These are hard and attach themselves to the bark and suck the sap from the plant. To destroy this pest spray twice before your trees or shrubs have leaves, with a spray of double-strength lime-sulphur — 5 pounds to 50 gallons of water. The last of the dangerous sucking insects is the red spider. This is a small insect which is difficult to see with the naked eye. The presence of this insect can be noticed by a fine shiny web, which covers a portion of the plant. This insect develops mainly during the hot, dry season. Damage from the red spider is not so much from sucking as from the poisonous web, which pollutes the sap in evergreens and other leaves, causing them to fade or yellow. A spray with nicotine sulphate, as for the aphid, is quite effective. A strong spray with cold water from a hose, after sundown is quite effective. However, most people pay little attention to the red spider, and when the leaves turn yellow, it is then too late to spray with clear water and the nicotine sulphate spray must be used.

In addition to the above mentioned insect pests, damage is often caused by fungus growths such as mildew, leaf spot, etc. Indications of the presence of these diseases are the fading of the leaves to a light green or even a whitish color. Some

leaves have a moldy covering on the bottom side. Eventually these damaged leaves will fall off. These fungus diseases appear usually during a hot damp season. The best treatment is a lime-sulphur spray, three pounds of powder to fifty gallons of water or four tablespoons to one gallon of water. Equally effective is a bordeaux spray in the same proportions.



## Pruning

A very important part of the care of trees is pruning. This is not a simple matter, similar to an operation on any living body. Unless you have made a thorough study of the subject, it is best to obtain the assistance of an expert.

Generally speaking, pruning should be done late in February or in March, when the sap is starting to run. In the northern latitudes pruning should never be done in April or May, or in September or October. Those are the months when the sap is running most freely. Pruning will result in a great loss of sap and could cause Black Heart.

## Pruning Roses

Common varieties of everblooming roses are Hybrid Tea, Floribunda, Grandiflora, Polyantha, etc. Blossoms are usually produced on stems which grow in the same season. This means that the more we remove last year's stalks, the more bloom production we can expect. These should be pruned early in the spring as soon as the winter covering has been removed and before the buds are open. In each of the rose bushes, select 4 to 7 of the healthiest cones, and cut them down to 5 or 6 inches in height so that each would have from 6 to 8 buds. The rest of its cones should be removed completely.

Climbing roses produce blossoms on the previous year's stems. Remove the old dead stems and cut back the rest to  $\frac{1}{3}$  of their length. When they have finished blooming, the stems should again be cut, removing from  $\frac{1}{3}$  to  $\frac{1}{2}$  of the new growth.



## Hedge

Hedges must be trimmed often during the growing period. If you have an old hedge, it can be renewed by cutting in April to a height of 10 to 15 inches. It will develop a new growth and you will again have a beautiful hedge.





# Trees

## SPECIES OR VARIETY

BOTANICAL NAME	COMMON NAME	HEIGHT	REMARKS
<i>Acer Negundo</i>	Boxelder	70 ft.	Desirable for street planting.
<i>Betula papyrifera</i>	Paper Birch	to 100 ft.	A very attractive tree shrub. It grows with multiple stems.
<i>Betula pendula</i> ( <i>gracilis</i> )	Cutleaf Weeping Birch	to 60 ft.	Fine for lawn specimens.
<i>Fraxinus pennsylvanica</i> <i>lanceolata</i>	Green Ash	60 ft.	Used extensively in shelter belts.
<i>Populus Sargentii</i>	Plains Poplar	60-70 ft.	Grows rapidly; used in shelter belts.
<i>Quercus macrocarpa</i>	Bur Oak	80 ft.	Grows very slowly. The leathery leaves turn to a bright scarlet in autumn.
<i>Salix acutifolia</i>	Sharpleaf Willow	20 ft.	The most reliable willow for shelter belt on the prairies.
<i>Salix alba sericea</i>	Silky White Willow	75 ft.	Silvery foliage makes an acceptable contrast against green background.
<i>Salix alba vitelina</i>	Golden Willow	15-25 ft.	Golden or yellow-barked willow, attractive in winter.
<i>Salix pentandra</i>	Laurel Willow	60 ft.	Dark green lustrous foliage.
<i>Tilia cordata</i>	Littleleaf Linden	100 ft.	Flowers yellowish-white, fragrant.
<i>Ulmus Americana</i>	American Elm	100 ft.	It is tall, graceful, wide spreading, with outward curving and pendulous branches.
<i>Ulmus pumila</i>	Siberian Elm	75 ft.	Very fast growing and useful in home planting.
<i>Acer saccharinum</i>	Silver Maple	80-120 ft.	One of the finest of Maples. Requires a good supply of moisture however, and liable to winter injury under dry conditions.

# Shrubs

## TALL

### SPECIES OR VARIETY

BOTANICAL NAME	COMMON NAME	HEIGHT	REMARKS
<i>Acer Ginnala</i>	Amur Maple	20 ft.	The leaves are small and prettily cut and in the autumn assume brilliant hues of red and scarlet. Fruits partly red.
<i>Acer tataricum</i>	Tatarian Maple	18-20 ft.	Attractive autumn foliage. Fruits reddish.
<i>Crataegus cordata</i>	Hawthorn	30 ft.	White flowers in June followed by shining scarlet fruits that hang well into the winter.
<i>Amelanchier alnifolia</i>	Saskatoon	6-20 ft.	Adapted to partial shade. Flowers white.
<i>Elaeagnus angustifolia</i>	Russian Olive	20 ft.	A silvery shrub.
<i>Malus baccata</i>	Siberian Crabapple	15-20 ft.	A mass of large white blossoms in the early spring followed later in the summer with clusters of bright red fruits.
<i>Malus floribunda</i>	Japanese flowering Craapple	25 ft.	Red buds, pale pink flowers in great profusion.
<i>Prunus maacki</i>	Amur Chokecherry		Flowers white. Fruits black. Bark brownish-yellow in winter.
<i>Prunus nigra</i>	Canada Plum	12-15 ft.	Flowers white fading to pink.
<i>Prunus pennsylvanica</i>	Pincherry	40 ft.	Flowers white. Fruits red. Bark reddish-brown.

<i>Sorbus americana</i>	American Mountainash	30 ft.	One of our best ornamental trees.
<i>Sorbus Aucuparia</i>	European Mountainash	50 ft.	Very hardy, dense and regular. Beautiful fern-like green foliage, covered from July till winter with clusters of red berries.
<i>Syringa amurensis japonica</i>	Japanese Tree Lilac	15 ft.	Produces large trusses of scented cream colored blossoms in July.
<i>Syringa Josikaea</i>	Hungarian Lilac	12 ft.	A sturdy, vigorous shrub with treelike growth, dark shining leaves, and bluish purple flowers.
<i>Viburnum Lentago</i>	Nannyberry	30 ft.	Creamy white, very fragrant flowers, light glossy green foliage, and oval, bluish-black berries.

## MEDIUM

### SPECIES OR VARIETY

BOTANICAL NAME	COMMON NAME	HEIGHT	REMARKS
<i>Cornus alba sibirica</i>	Siberian Dogwood	6-8 ft.	Flowers white. Bark bright red in winter. Bluish-white berries.
<i>Cornus stolonifera</i>	Redosier Dogwood	10 ft.	Flowers creamy-white.
<i>Lonicera Maackii</i>	Amur Honeysuckle	10-15 ft.	Flowers white. Flowers fragrant. Fruit dark red.
<i>Lonicera tatarica</i>	Tatarian Honeysuckle	10 ft.	A shrub of rapid growth. Desirable as a tall spreading hedge for screen effect. Thrives in either shade or sun. Deep pink flowers followed by snowy red berries.
<i>Ribes aureum</i>	Golden Currant	5 ft.	Attractive bright green foliage, compact habit. The most satisfactory hedge plant for shade.
<i>Sambucus racemosa</i>	European Red Elder	10-12 ft.	Flowers yellowish-white. Fruits scarlet, ripening early.

<i>Syringa amurensis</i>	Amur Lilac	20 ft.	This forms a well shaped bush. Produces large trusses of scented cream-colored blossoms in July.
<i>Syringa oblata dilitata</i>	Korean Early Lilac	12 ft.	A nonsuckering variety with large glossy deep green foliage, usually developing a rich fall coloring.
<i>Syringa vulgaris</i>	Common Lilac	10-20 ft.	Flowers lilac white. Fragrant, widely adapted.
<i>Viburnum trilobum</i>	American Cranberrybush	6-12 ft.	A native bush that succeeds well under cultivation. Large white blossoms in spring followed by attractive bright red cranberry clusters in fall.
<i>Hippophae rhamnoides</i>	Common Seabuckthorn	25 ft.	Silvery leaves, male and female plants. Fruits orange-yellow.

## LOW

### SPECIES OR VARIETY

BOTANICAL NAME	COMMON NAME	HEIGHT	REMARKS
<i>Amorpha fruticosa</i>	Indigobush	4-6 ft.	Bears heavy clusters of deep purple flowers in June.
<i>Cotoneaster acutifolia</i>	Peking Cotoneaster	5-7 ft.	A robust shrub with slender spreading branches. Flowers pinkish followed by black fruit. A beautiful plant for garden hedges.
<i>Euonymus nana</i>	Dwarf Euonymus	2-3 ft.	Dwarf burning bush. Dwarf shrub, orange-red fruits, and attractive foliage.
<i>Lonicera coerulea edulis</i>	Sweetberry Honeysuckle	3-4 ft.	Flowers yellow in the end of May. Compact and symmetrical of form, foliage clean cut and of an attractive bluish green.
<i>Potentilla fruticosa danurica</i>	Dahurian Cinquefoil	2 ft.	A shrub, producing flowers like single white roses throughout the summer.

<i>Prinsepia sinensis</i>	Cherry Prinsepia	3-4 ft.	Suitable for low hedge. Fruits scarlet.
<i>Prunus tenella</i>	Russian Almond	3-5 ft.	Flowers deep pink. Early flowering, fragrant, drought resistant.
<i>Ribes alpinum</i>	Alpine Currant	4 ft.	An attractive shrub with shining foliage and masses of yellow flowers in spring. The ideal hedge plant.
<i>Sorbaria sorbifolia</i>	Ural False Spirea	6 ft.	Flowering yellowish-white attractive foliage of dwarf habit. Flowers rose colored. Free bloomer during mid-summer and autumn.
<i>Spiraea trichocarpa</i>	Korean Spirea	5-6 ft.	Compact spreading bush with angular rigid and arching shoots and the snow-white flowers are freely borne at the ends of the short lateral shoots in rounded or dome-shaped cluster.
<i>Spiraea pikoviensis</i>	Pikov Spirea	4-5 ft.	Flowers white. Strong bushes.
<i>Spiraea trilobata</i>	Threelobe Spirea	4-5 ft.	Flowers white. Fan shaped. Attractive foliage.



## Perennial Flowers for Gardens and Borders

### A Classified and Selected List of the Best Varieties

#### DWARF

Mostly under 12 inches; a few, to 18 inches height.

Useful as edges in the line planting.

#### SPECIES OR VARIETY

BOTANICAL NAME	COMMON NAME	HEIGHT	BLOOMING PERIOD	COLOR FLOWERS	REMARKS
		IN INCHES			
<i>Alyssum saxatile</i>	Goldentuft Allysum	12	May	Yellow	Edging for spring
<i>Aster alpinus</i>	Alpine Aster	9	June- July	Blue	Border plant
<i>Campanula carpatica</i>	Carpathian Bellflower	6	July	Blue- White	Rockery or edging
<i>Cerastium tomentosum</i>	Snow-in-Summer	6	June	White	Silver foliage border
<i>Heuchera sanguinea</i>	Coralbells	18	June- July	Red	Escalloped foliage
<i>Myosotis alpestris</i>	Alpine Forget-me-not	9-12	June- July	Azure- Blue	Wet ground
<i>Phlox subulata</i>	Moss Phlox	12	May- June	Rosy- Purple	Rock and ground cover
<i>Primula cortusoides</i>	Cortusa Primrose	12	May- June	Rose	Hardy Primrose
<i>Sedum kamtschaticum</i>	Orange Stonecrop	12	July	Yellow	Fine edging or rock plant
<i>Veronica incana</i>	Woolly Speedwell	Low to Med.	July- Aug.	Blue	Rockery
<i>Veronica latifolia</i>	Hungarian Speedwell	—	June- July	Blue	Rockery
<i>Vinca minor</i>	Myrtle	4	April	Purple	Native Ground Cover
<i>Viola tricolor hortensis</i>	Garden Pansy	8	May- Oct.	Various	Protracted by shearing



## MEDIUM

1½ to 3 feet mostly of bushy growth.  
Useful as fillers in the middle of the border.

### SPECIES OR VARIETY

BOTANICAL NAME	COMMON NAME	HEIGHT	BLOOMING PERIOD	COLOR FLOWERS	REMARKS
		IN FEET			
<i>Achillea millefolium</i>	Common Yarrow	1-2	July-Aug.	White-Pink	Full button clusters
<i>Achillea ptarmica</i>	Sneezewort Yarrow	1-2	July	White	
<i>Aquilegia coerulea</i>	Colorado Columbine	1-2	June-July	White & Blue	Endures shade
<i>Campanula glomerata dahurica</i>	Dahurian Bellflower	1-2	July	Purple	Very large bells
<i>Centaurea montana</i>	Mountain-Bluet	2	June-July	Blue-White	Ragged flowers
<i>Centaurea dealbata</i>	Persian Centaurea	1-2	July	Rose-Pink	
<i>Chrysanthemum coccineum</i>	Florists Pyrethrum	1-2	June-July	White Pink Red	Very late cut flowers
<i>Chrysanthemum maximum</i>	Pyrenees Chrysanthemum	1-2	June-July	White	
<i>Dicentra spectabilis</i>	Common Bleeding Heart	1-2	May-June	Pink	'Bleeding Heart' Racemes
<i>Dictamnus fraxinella</i>	Gasplant	2-3	June-July	White, Rose	Shrubby
<i>Gypsophila paniculata</i>	Babysbreath	2-3	July-Aug.	White Mist	The dainty 'Babv's Breath'
<i>Heliopsis helianthoides</i> var.	Pitcher Heliopsis	2-3	July-Sept.	Yellow	Single, daisy-like
<i>Iris germanica</i>	German Iris	1½-3	June	Various	Wonderful diverse varieties
<i>Lilium species</i>	Lily	2-4	July-Aug.	Various	The choicest white
<i>Lychnis chalcedonica</i>	Maltese cross Campion	2-2½	July-Aug.	Scarlet, White	Phlox-like flowers

<i>Papaver orientale</i>	Oriental Poppy	2-3	June- July	Red, Pink, White	Immense, single poppies
<i>Penstemon acuminatus</i>	Sharpleaf Penstemon	2½	June- July	Mixed Blue	Good ribbon border
<i>Paeonia</i>	Peony	2-3	May- June	Various	Magnificent cut flowers
<i>Phlox species</i>	Pyramid White and Hybrids	2-3	July- Aug.	Various	Many choice varieties
<i>Rudbeckia speciosa</i>	Showy Coneflower	2-3	Aug.- Sept.	Yellow & Black	An odd, showy type
<i>Valeriana officinalis</i>	Common Valerian	2-3	June- July	White, Pink	Heliotrope Scented spikes

## TALL

Height, 3 feet and up.

Useful as background plants in the back of the border.

### SPECIES OR VARIETY

BOTANICAL NAME	COMMON NAME	HEIGHT		BLOOMING PERIOD	COLOR FLOWERS	REMARKS
		IN FEET				
<i>Anchusa dropmore</i>		4		June- Sept.	Deep Blue	Intermittent Real blue
<i>Campanula persicifolia</i>	Peachleaf Bellflower	4		July	White, Blue	Graceful of form
<i>Delphinium hybridum</i>	Mongrel Larkspur	3-5		July- Aug.	Various	The hardy 'Larkspurs'
<i>Helenium autumnale</i>	Common Sneezeweed	3		Aug.- Sept.	Yellow, Brown	Bushy
<i>Hollyhocks double</i>	Hollyhock	4-6		June- Oct.	Separate Colors	Torch-like pillars
<i>Iris germanica</i>	German Iris	3		June	Various	
<i>Iris siberica</i>	Siberian Iris	3		June	White, Blue	Many flowers
<i>Lythrum salicaria var.</i>	Morden pink Lythrum	3-4		July- Aug.-	Rose	Bushy, moisture loving

## Plants for Rock Garden

### SPECIES OR VARIETY

BOTANICAL NAME	COMMON NAME	HEIGHT	COLOR	BLOOMS
<i>Achillea ptarmica</i>	Sneezewort Yarrow	18 in.	White	July-August
<i>Alyssum</i> — in variety	Goldentuft Alyssum	12 in.	Yellow	All summer
<i>Aquilegia</i> — in variety	Columbine	2-2½ ft.	Various	Late Spring
<i>Arabis alpina</i>	Alpine Rockcress	6 in.	White	April and May
<i>Campanula carpatica</i>	Carpathian Bellflower	6 in.	Blue	June till fall
<i>Cerastium tomentosum</i>	Snow-in-summer	6 in.	White	Early summer
<i>Dianthus deltoides</i>	Maiden Pink	15 in.	Pink	May to July
<i>Gypsophila repens</i>	Creeping Gypsophila	6 in.	White	June to July
<i>Heuchera</i>	Coralbells	12-18 in.	Pink	June to September
<i>Myosotis</i>	Forget-me-not	8 in.	Blue	All summer
<i>Nepeta mussini</i>	Persian Nepata	12-18 in.	Blue	All summer
<i>Phlox subulata</i>	Moss Phlox	10 in.	Pink or White	April and May
<i>Sedums</i> — in variety	Stonecrop	4-24 in.	Various	Various
<i>Sempervivum</i>	Houseleek	3 in.	Red, pale	May and June
<i>Thymus</i> — in variety	Mother-of-thyme	4-6 in.	Various	June and July
<i>Trollius</i>	Globeflower	12-18 in.	Various	Globe shape flowers
<i>Veronica</i> — in variety	Speedwell	2-24 in.	Various	Various
<i>Viola</i> — in variety	Violet	6-8 in.	Yellow	All summer



# INDEX

Foreword .....	7
Landscape Classes .....	15
A Little Landscape History .....	17
How to Plan and Plant Small Lots .....	20
Planting .....	31
Sunlight and Shadow .....	49
Care of Plants .....	63
Lawn — Grasses .....	68
Insect Pests .....	80
Pruning .....	82
Pruning Roses .....	83
Hedge .....	84
Trees .....	85
Shrubs .....	86
Perennial Flowers .....	90
Plants for Rock Garden .....	93









#### ABOUT THE AUTHOR...

He was born in 1908 in Eastern Ukraine. In 1925 he completed High School in Rivne, and in 1928 graduated from the Horticultural College in Lublin. He worked as Provincial Horticulturist from 1928 to 1942. In 1947 he graduated from the Ukrainian Technical University in Regensburg, and until 1949 did research in the Botanical Institute, Joh. Wolfgang Goethe University in Frankfurt, Germany. After arriving in Canada in 1949, he worked in the Dominion Laboratory in Winnipeg until 1952. From 1952-1959, he worked as Head Gardener in Greater Winnipeg (GWSD), and since 1959 he has been employed as City Horticulturist in Yorkton, Sask. He completed a course in Landscape Architecture at the American Landscape School at Des Moines, Iowa, and he is a qualified member of the American Landscape Association. The author has had published ten of his books in the field of horticulture.



## BOOK WELCOMED BY GARDENERS

Gardeners in Saskatchewan will welcome a new book being printed in Yorkton by the Redeemer's Voice Press. Called "LANDSCAPING FOR MODERN LIVING IN THE PRAIRIE PROVINCES" it was written by Theodore Onufrijchuk, Yorkton's city horticulturist.

In reading a review copy kindly mailed to me by Mr. Onufrijchuk recently I found it to be a unique combination of homespun philosophy, history, fine prose and invaluable information. Into its 98 pages is crammed a wealth of detail designed to assist prairie gardeners. It is one of the few such publications available, most of the others being designed for eastern or United States readers.

The text is illustrated with sketches done by the author, and on the attractive cover is a color photo of window boxes in full bloom at Yorkton's city hall.

The author deals extensively with the planning of small plots such as individual home grounds and public and industrial landscaping. Included are sections on rock gardens, grasses, perennials, annuals, shrubs, trees, and insect control.

Of great interest to me were the classified listings of recommended trees and plants giving height, color, blooming period and other information badly needed by the amateur in this field.

Yorkton is indeed a fortunate city, and a much more beautiful one, because of Mr. Onufrijchuk. Since his arrival from Winnipeg three years ago he has developed the beautiful new botanical gardens, designed several parks and planned some new ones for future development. He supervises the annual Christmas decorating done by the city and has won the praise of public and council with his artistic efforts. He is no novice either in the field of practical horticulture, and landscaping or in writing about these subjects. This bright, informative booklet, with its sometimes quaint and picturesque approach is his 10th volume.

HAROLD LONGMAN

THE LEADER-POST (REGINA)



## CITY HORTICULTURIST AUTHOR OF NEW BOOK

A compact new informative and attractive book of 93 pages, published by the Redeemer's Voice Press in Yorkton, is now available to all interested in beautiful surroundings and fine gardens. The title of the book is "LANDSCAPING FOR MODERN CANADIAN LIVING IN THE PRAIRIE PROVINCES" and it is the 10th in a series of publications by Theodore Onufrijchuk, landscape architect and Yorkton's city horticulturist.

The cover illustration in color gives merely a hint of the wealth of information on landscaping, tree, shrub and hedge planting for beautiful home grounds, and gardening in general. The photograph on the front cover is of the Yorkton City Hall showing flower beds and window box blooms at their best.

Testimonials to the homey philosophy of the author and the book's importance to the home-owner who wants the best in landscaping are from L. H. Shebeski, professor and head of the department of plant science, University of Manitoba, and Yale C. Moeller, president, American Landscape School at Des Moines, Iowa.

The interesting text is well illustrated with sketches by the author. In the various subjects discussed by Mr. Onufrijchuk is a little landscape history along with advice on private and public landscaping, from individual home grounds through public parks, squares, boulevards, school premises and industrial plants to cemeteries.

There are sections on how to plan and plot small lots, planting and the care of plants, use of sunlight and shadow, on lawns and grasses best to use, on perennial flowers and plants for rock gardens. There is advice on insect pests and their control and on pruning, plus tabulated and therefore finger-tip information on a classified and selected list of the best varieties of perennial flowers for gardens and borders, dwarf, medium and tall.

The book is a credit to the author and a tribute to Yorkton. It is a publication invaluable to all concerned in keeping grounds and gardens beautiful. It is among the best of Mr. Onufrijchuk's books in the field of horticulture.

YORKTON ENTERPRISE